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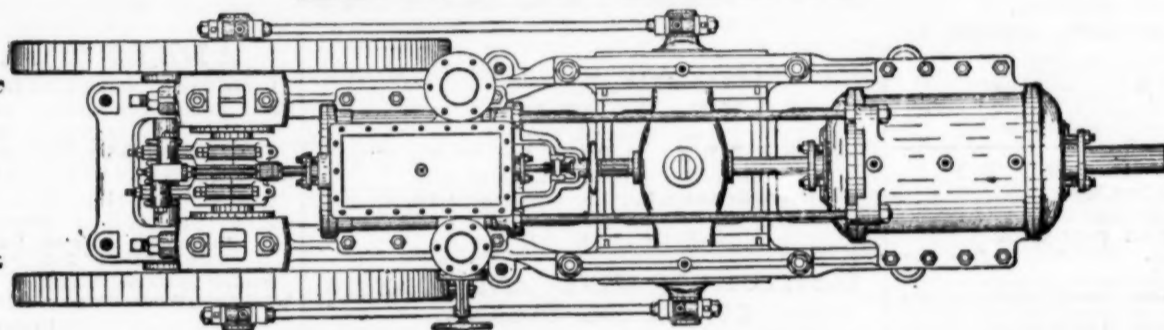
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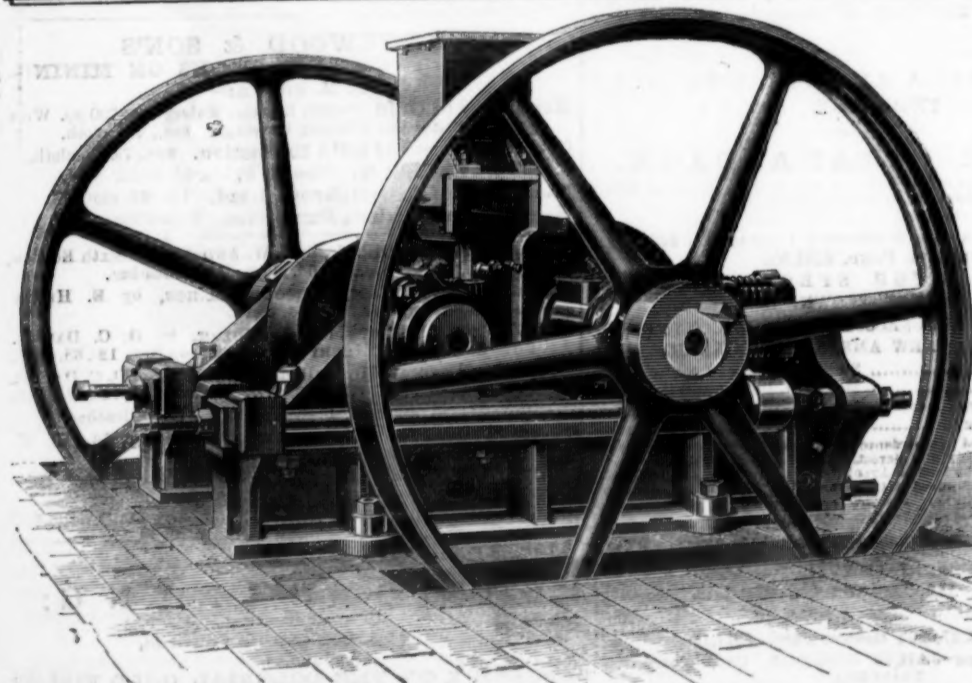
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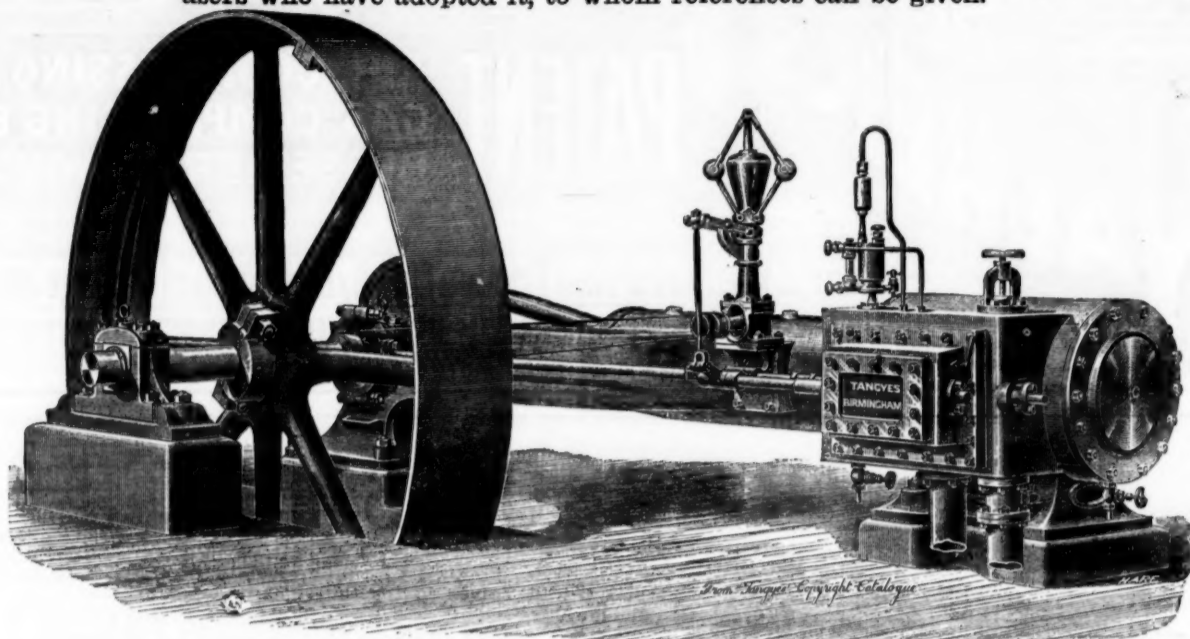
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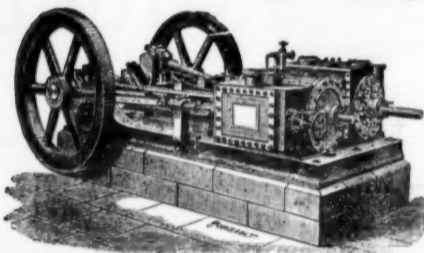
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GEORGE GREEN'S PATENT Self-Acting or Automatic Ore Dressing Machinery,

A Special Plant, on a reduced scale, has been erected at the Works by which samples of METALLIC ORES—up to Five Tons may be treated, and the commercial value determined, in this way the most suitable arrangement of Plant is ascertained, a considerable advantage to intending Purchasers of Crushing and Concentrating Plant.

GOLD STAMP AND OTHER MILLS.

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For PURE ALUMINIUM

98 to 99½ per cent. (98 per cent. minimum guaranteed) in

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WROUGHT IRON WELDED TUBES and FITTINGS for GAS, WATER, and STEAM.

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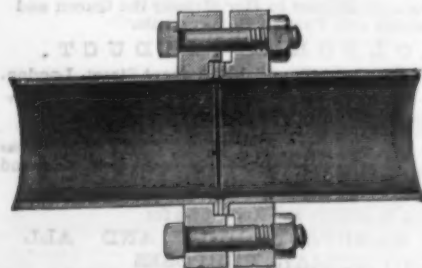
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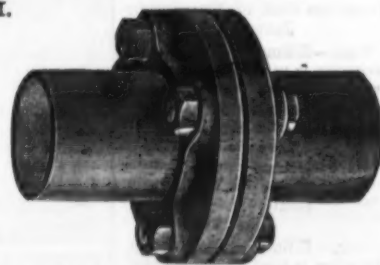
LAP-WELDED IRON AND STEEL BOILER TUBES

FOR LOCOMOTIVE, MARINE, AND OTHER MULTITUBULAR BOILERS.

STEEL & IRON PLATES FOR BOILERS, BRIDGES, &c.



SECTION OF PATENT FLANGED JOINT



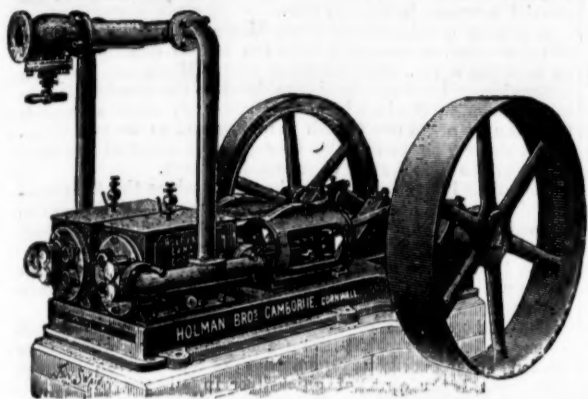
PLAN OF PATENT FLANGED JOINT.

Head Offices: 41, OSWALD STREET, GLASGOW.

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ESTABLISHED 1839.

Patentees and Sole Makers of
"THE CORNISH" ROCK DRILL and "THE CORNISH" COMPRESSOR.



FIRST
SILVER MEDAL,
Highest Award,
Mining Institute
Contest, 1881.

Three Makers
represented.



FIRST
SILVER MEDAL
Highest Award,
Royal Cornwall
Polytechnic
Jubilee Exhibition
Contest, 1882.

Five Makers
represented.

AWARDED SILVER MEDAL INTERNATIONAL
INVENTIONS EXHIBITION, 1885.

RECORD OF WORK DONE

At Botallack Mine, St. Just, Cornwall, **TWELVE MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** drove, sunk, and rose **288 FATHOMS** in **12 MONTHS**, equal to five times the Speed of Hand Labour.

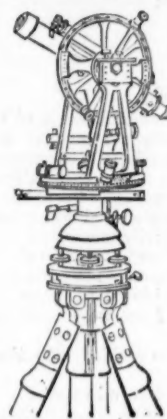
At Wheal Grenville Mine, Camborne, Cornwall, **SIX MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** started from the **150 FATHOMS** level and put up in **EIGHT MONTHS** a **11 FEET** by **5 FEET PERPENDICULAR RISE 46 FATHOMS 5 FEET 6 INCHES**, and about midway drove **1 FATHOM 5 FT.** No communication of any kind was effected until holing to the Shaft brought down from surface.

Estimates for **ROCK BORING PLANT** and **GENERAL MINING MACHINERY** on Application.

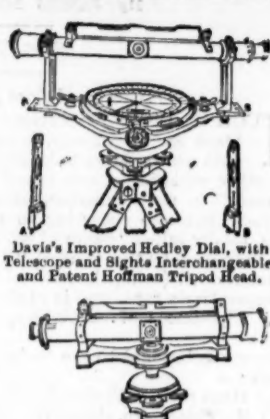
London Offices: 7 and 9, LEADENHALL BUILDINGS, E.C.

JOHN DAVIS AND SON,

ALL SAINTS WORKS, DERBY;
118, NEWGATE STREET, LONDON.



Transit Theodolite with Patent
Hoffman Tripod Head, and
Trough Compass.



Dumpy Level with
Hoffman Patent Tripod Head.

**MINING, SURVEYING, AND
ENGINEERING INSTRUMENTS:**
THEODOLITES. LEVELS. TACHEOMETERS.

Davis's Improved Hedley Miners' Dials, with
HOFFMAN PATENT TRIPOD HEAD;
AND ALL DESCRIPTIONS OF MATHEMATICAL AND
MINING SURVEYING INSTRUMENTS.

Revised Illustrated Catalogues Free to any Part of the World.
SECTION (A) MATHEMATICAL DEPARTMENT AND SAFETY LAMPS
SECTION (B) ELECTRICAL DEPARTMENT.

Gold Medal Awarded Mining Exhibition, 1890.
A. B. C. CABLE CODE, 4TH EDITION.

AWARDS: CRYSTAL PALACE, 1890; TASMANIA, 1891; KIMBERLEY, 1892.

CONCENTRATION.

The Clarkson-Stanfield Concentrator (Limited).

In the **CLARKSON-STANFIELD** process of Concentrating Refractory and Complex Ores no water is required; dust is reduced to a minimum; the loss of Mineral through water-borne Slimes is obviated.

OUTPUT ½ TO 2 TONS PER HOUR, ACCORDING TO SIZE OF MACHINE.

CONCENTRATOR TO BE SEEN IN OPERATION AT THE COMPANY'S ONLY ADDRESS

6, COLONIAL AVENUE, MINORIES, LONDON, E.

The Machine is superior to Sieves for Sizing Homogeneous Substances, such as Emery, Sand, and Powders, and may be used to great advantage in the preparation of Ochre.

N.B.—The owners of the Carnadochan Mine, near Bala, North Wales, will, by arrangement, show their **CLARKSON-STANFIELD** plant working on a Refractory Low Grade Gold Ore.

NEW PATENTS.

LIST OF APPLICATIONS for New Patents relating to Mining Metallurgical, Engineering, Railway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs. Hayner and Company, Patent Agents, 37, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

- 1465 Southgate Engineering Company (Limited), 45, Southampton Buildings, Chancery Lane, London.—Improvements in air or gas valves for regenerative gas furnaces.—January 20.
- 1442 Orla J. Scott, 7, Staple Inn, London.—Boiler feeders.—January 21.
- 1443 James Buchanan, 96, Buchanan Street, Glasgow.—Improvements in and relating to steam boiler furnaces.—January 21.
- 1484 Henry Martin, Neath Road, Llanhamlet, Glam.—Machine for discharging residues from retorts in zinc or spelter furnaces.—January 21.
- 1593 Bernard Richard Body, 21, High Holborn, London.—Improvements in or relating to steam boilers.—January 21.
- 1547 George Willis Barnes, 5, Quality Court, Chancery Lane, London.—Improvements in vertical boilers.—January 21.
- 1571 Siemens Brothers and Co. (Limited), 28, Southampton Buildings, Chancery Lane, London.—An improvement in electricity meters.—January 22.
- 1719 William Henry Holehouse, 4, Russell Terrace, Bradford.—Improvements in direct-acting piston and pistonless pumping engines having one or any number of cylinders.—January 24.
- 1797 Luke Hushworth and Albert Fletcher, Birch Mills, Ashton-under-Lyne.—An improved furnace door for steam boilers.—January 25.
- 1798 George Sumner, 70, Market Street, Manchester.—Improvements in and connected with water level indicators for steam generators and the like.—January 25.
- 189 David Purves, 55, Chancery Lane, London.—Improvements in tubulous steam boilers.—January 25.

SPECIFICATIONS PUBLISHED.

844, Pinkney, Internal combustion engines, 1895; 38 0, Standing, boilers, 1895; 454, Furneaux and Butler, motor engines, 1895; 4424, Robinson, steam boiler, &c., water gauges, 1895; 20886, Bonner and others, steam boilers, 1895.

The above specifications published may be had of Messrs. Hayner and Co., 37, Chancery Lane, London, at 10d. each, including postage.

EDUCATION IN MINING AND ELECTRICITY.—Now that the scope of the Civil Engineering College at Sibpore is to be enlarged by the inclusion of mining and electrical engineering in the curriculum of studies, this institution ceases to be strictly a civil engineering college, especially seeing that the training of mechanical engineers is no unimportant feature in the education imparted there, and it would seem that the time has now come when it might be styled the Government Technical College, Sibpore. The need of a jetty opposite the college where the river steamers could stop and land passengers from Calcutta and elsewhere is much felt, and until this want is supplied there always will be a barrier to the attendance of a large section willing to go as daily pupils from town and neighboring places.—*Indian Engineering.*

RAF, DRINK, AND BE MERRY.—That is all very well, and no doubt, in moderation, eating, drinking, and merriment are very good things. But can any one of us—when the best of us—trust himself to be invariably moderate? No, indeed! We are all apt at times to go just a little beyond the mark, and then come headache and regrets. At such times we can appreciate a friend—one who will stand by us and put us right; and such a friend we invariably find in Holloway's Pills. They did not fail our fathers at similar crises, and they do not fail us. It is no fiction, but a well-known fact, that Holloway's Pills are a certain cure for headache, biliousness, and all similar troubles.

JOINT-STOCK COMPANIES.

NEW REGISTRATIONS.

THE following are among the joint-stock companies registered at Somerset House since our last notice:—

Lady Evelyn Gold Mines (Limited).—Registered January 23 by Goodchild and Hammond, 1, Queen Victoria Street, E.C., with a capital of £125,000 in £1 shares. Object: To adopt and carry into effect an agreement, particulars of which are not given; to seek for and secure openings for the employment of capital in West Australia, or elsewhere, to acquire any mines, mining rights, grants, leases, claims, concessions, options of purchase, &c., to develop and turn to account the same in such manner as the company shall see fit, and to carry on the business of a mining and smelting company in all its branches.

British and Colonial Agency (Limited).—Registered by Goodchild and Hammond, 1, Queen Victoria Street, E.C., with a capital of £100,000 in £1 shares. Object: To adopt and carry into effect a certain undated agreement, and to examine, prospect, explore, develop, maintain, work, and turn to account any mines, mining claims, rights, leases, concessions, options of purchase, alluvial deposits, metalliferous land, &c., in Australia or elsewhere; to undertake and carry on any business transaction or operation commonly carried on or undertaken by financiers, promoters of companies, bankers, underwriters, &c.

Birmingham Corrugated Iron Company (Limited).—Registered January 25 by A. H. Arnold and Sons, 10, New Court, Lincoln's Inn, W.C., with a capital of £40,000 in £10 shares. Object: To acquire and carry on the business of a galvanised iron and fittings manufacturer, as hitherto carried on by the Birmingham Corrugated Iron Company, and with a view to such acquisition to enter into an agreement with John I. Parkes. The directors are J. I. Parkes and A. I. Parkes. Qualification 25 shares. Remuneration to be fixed by the company.

Brockenridge Cannel Coal Company (Limited).—Registered January 27 by Kerly, Son and Verden, 14, Great Winchester Street, E.C., with a capital of £100,000, divided into £100,000 shares of £1 each. Object: To adopt and carry into effect an agreement (referred to in Clause 4 of the company's Articles of Association) expressed to be made between W. E. A. Read and J. W. Brigstock of the one part, and this company of the other part; to acquire rights and interest in mineral and other lands, seams, veins, beds of coal, ironstone, brick earth, fire and other clay, and to search for, win, raise, manufacture, make merchantable, sell and deal in coal, cannel, coke, iron, ironstone, black band, fireclay, brick earth, mineral oils, timber, &c.

Dual Syndicate (Limited).—Registered January 28 by W. H. Martin and Co., 15, King Street, Cheapside, E.C., with a capital of £10,000 in £1 shares. Object: To acquire any landed property, or interests therein, in South Africa, West Australia, New Zealand, or elsewhere, and to develop and turn to account the same in such manner as the company shall see fit, and, with a view to the above objects, to adopt and carry into effect certain agreements. The directors are L. Phillips, M. B. Myers, S. J. Messinger, H. Cohen, and H. Limebeer. Qualification, £250. Remuneration to be fixed by the company.

United Australian Exploration (Limited).—Registered January 20 by Ingle, Holmes and Sons, 20, Threadneedle Street, E.C., with a capital of £1,000,000, divided into 1,000,000 shares of £1 each. Object: To acquire by purchase, lease, or otherwise any freehold or other farms, properties, mines, mining, water, and other rights, grants, leases, claims, concessions, licenses, easements, or authorities of and over mines, lands, mineral properties, &c., in Australia, or elsewhere; to prospect for, open, work, explore, develop, and maintain any diamond, gold, silver, copper, coal, and other mines, properties, and works; to develop and turn to account such properties as may from time to time be acquired by the company, and to carry on the business of a mining, milling, smelting, and metallurgical company in all or any of its branches.

Mining Transport and General Finance Company (Limited).—Registered January 20 by Gibson, Weidon and Bulbrough, 27, Chancery Lane, W.C. Capital £150,000, divided into 150,000 founders' 25,000 preference and 125,000 ordinary shares of £1 each respectively. Object: To adopt and carry into effect two agreements, each bearing date January 10 and made between W. F. Mildren of the one part, and J. Richardson, on behalf of this company, of the other part, for the acquisition of certain shares, options and agreements, and of the business of Martin and Co., of Throgmorton House, Copthall Avenue, E.C., and to acquire options or enter into contracts for the acquisition

of any lands, gold, silver, or other mines, mining, water, and other rights, grants, leases, claims, concessions, options and other properties in West Australia or elsewhere, to develop and turn to account the said properties in such manner as the company shall see fit, and to carry on the business of a mining, milling, smelting, and metalliferous company in all or any of its branches.

CONTRACTS OPEN:

FOR MINE, QUARRY, RAILWAY, AND ENGINEERING WORK, STORES, &c.

* We shall be obliged by being promptly placed in possession of particulars regarding contracts open for competition, and of the results of successful tenders. In the latter case contract prices should be given.

The date given is that by which tenders must be delivered, in nearly all cases further information can be obtained on application at the addresses given. In applying for such the name of "The Mining Journal" should be mentioned as the original source of the information, concerning which further particulars are required.

HOME CONTRACTS.

Railway Wagons. February 10 (London, S.W.).—The Crown Agents for the Colonies, acting on behalf of the Uganda Railway Committee, invite tenders from manufacturers for the supply of covered and low-sided goods wagons, specification and forms of tender for which can be obtained on application to the Crown Agents for the Colonies, at whose offices the drawings will be on view between 10 a.m. and 4 p.m. (Saturdays 10 till 2). A charge of £1 to be made for each specification. Tenders to be delivered in sealed envelopes, addressed to the Crown Agents for the Colonies, Downing Street, S.W., and endorsed "Tenders for Wagon Rolling Stock, Uganda Railway."

Bridges. February 10 (London, E.C.).—For supply of plate girder bridges for the Bengal-Nagpur Railway Company (Limited). Specifications and forms of tender can be obtained at the company's office, 112, Gresham House, Old Broad Street, E.C. For each specification a fee of 15s. is charged, which will not be returned. Tenders to be delivered by noon on February 10.

Girders. February 11 (London, W.).—For the supply of about 185 tons of steel bridge girders and other steel work for the Great Western Railway Company. Plans and specification may be seen and forms of tender and bills of quantities obtained at the office of the engineer at Paddington Station, between 10 a.m. and 4 p.m. Tenders, addressed to Mr. G. E. Mills, secretary, Paddington Station, London, and marked outside "Tender for girder work," will be received on or before 11th inst.

Railway Stores. February 11 (London, E.C.).—For the supply of (1) miscellaneous tools and stores; (2) brass boiler tubes; (3) bearings for axle-boxes; (4) steel (cast ferrule, blister shear), for the Southern Mahratta Railway Company, as per specifications and drawings, which may be seen at the company's offices. Tenders to be addressed to Mr. Edw. Z. Thornton, secretary, 44, Finsbury-circus, London, E.C.

Ironwork. February 12 (Galway).—For ironwork for a pair of small dock gates. Tenders should reach Mr. James Perry, M.E., M.I.C.E., county surveyor, Galway, by 11th inst.

Railway Turntable. February 15 (Leeds).—For supply of a cast-iron railway turntable, 13 feet diameter, required for the Meadow-lane Gasworks, for the Gas Committee. Plans can be seen and further particulars obtained on application to Mr. Tooley, manager of the works. Tenders, suitably endorsed, and addressed to the Chairman of the Gas Committee, Municipal Buildings, Leeds, will be received up to 15th inst.

Bridge. March 5 (Bucharest).—For the construction of a wooden bridge over the River Borosne. Estimate, 82,802 francs. Particulars from the Ministry of Public Works, Bucharest, Roumania.

River Works. March 10 (Bucharest).—The Roumanian Ministry of Public Works, Bucharest, invite tenders for river conservation and defence works on the banks of the Trotosch. Estimate, 52,329 francs.

Railway Carriages. (Bucharest).—Tenders for the supply of carriages and goods wagons for the Roumanian State Railways will be required very shortly. Particulars can be obtained on application to M. Salgny, Director-General of the State Railways, Bucharest, Roumania.

MINING AND METALLURGY OF QUICK-SILVER IN MEXICO.

By JAMES MACFAR.

Part V.

(Continued from page 158.)

MUCH the largest proportion of the ore obtained is of the black earthy variety, known locally as "negro" ore, with which native quicksilver is occasionally associated. The other varieties of ore found are those known locally as "granato" (a pure cinnabar, usually in spots and crystals in the rock, but also occurring in the sandy clay pipes or vein-filling, locally called "panino," which is usually looked on as a good indication by the miners), "fierroso," and "acerado;" the last mentioned (being the mineral known as "guadalcazarite") is comparatively rare, and is really a selenide of mercury and zinc. (Specimens of all these qualities of ore were upon the table.)

The ore as brought to the surface may be divided into three classes:—

- (a.) Hard rock, with cinnabar and "steel" ore in spots.
- (b.) Rich black ore, chiefly of a soft character.
- (c.) "Tosca" ore, a soft and decomposed yellow rock, steatitic in character, containing disseminated ore, chiefly cinnabar, with some "granato" ore.

By far the largest proportion of the ore is of the soft black variety. The plans of the workings show clearly the irregular character of the deposits and the large ore chambers which have already been discovered.

The operations of the company have been practically confined to this mine, it having long been known to be the richest of the deposits.

During 1891-94 a large amount of development work was carried out, and the workings of this group of mines now extend for a distance of over 250 metres, and to a depth of over 60 metres below the old San Antonio workings. As depth was attained, and the exploration work proceeded, the character of the country rock became more apparent, and the geyser deposit theory originally started with received further confirmation.

To illustrate the variety of rock met with, the following statement of the workings in progress in September, 1893, may be given:—

Title of Working. Rock and Mineral met with.

Augustias "A": Ordinary gypsum.

Zero Level "N": Gypsum giving place to "almendrilla" with a shoot of "panino" carrying black and "fierroso" ore. The "fierroso" ore extending in places between the layers of gypsum. After a few metres gypsum again comes in.

San Roberto Winza. Depth 35 metres below Zero Level: Started in gypsum at Zero Level, the gypsum continued downwards, a small vein of orpiment being cut, also one of "acerado" with cinnabar in crystals. Limestone struck about 10 metres above Santa Anna stop. Limestone much fractured.

Zero Level, Crosscut No. 1: Cut through gypsum carrying a little ore, then "almendrilla," and is now in "cuesco," a species of "almendrilla," but harder and with more clay.

San Martin from Crosscut No. 1: Goes down on "panino" in "almendrilla."

Zero Level, Crosscut No. 2: Passes through gypsum, enclosing occasional pieces of altered limestone. Occasional pockets of "fierroso" ore have been noticed.

Santa Anna Stope: The floor and roof of this ore chamber are limestone, with gypsum showing occasionally. The mass of ore-bearing material is an extraordinary mixture, black quartz, white quartz, much fluor spar, with sulphur and clear crystalline gypsum, being mixed with cinnabar, metacinnabarite and "fierroso" ore.

San Guillermo: Runs south-east from Santa Anna on a quartz leader carrying ore.

Santa Elena: Over this old stope a large body of "fierroso" ore has been found, as if folded over the lower stope.

Two drives, No. 1 to north, following ore upwards in gypsum. No. 2 to south is on a thick layer of "fierroso" also in gypsum.

A drift in lower part of south-west is on a quartz leader carrying ore.

The ore here is chiefly "fierroso," with small nests of black ore, and occasionally a little sulphur.

San Vincenti: Driven on what is thought to be the outlet from the Santa Elena ore body. Runs north-west, and follows downward a "panino" shoot, passing through gypsum with sometimes "almendrilla."

Pozo de Guia de la Fé: This drift is on "panino" between gypsum and limestone, the "panino" heavily charged with black ore and cinnabar. A mass of dark limestone was cut through.

Title of Working. Rock and Mineral met with.

Santa Catalina: The drift has followed a leader promising well for over 120 metres. "Paninos" passing through gypsum with limestone and striking "tosca" (supposed decomposed porphyritic rock). Between the "tosca" and limestone veinlets of ore are showing, and here and there in "tosca" there are spots of ore.

With such a variety with which to deal, the cost of the workings naturally varies considerably. Nearly all the work is carried out by contract, and in Table No. V. the cost of working in detail, giving all the various items of expenditure per cubic metre, will be found very clearly stated.

The class of labour available is much better than one would imagine. Very good carpenters and blacksmiths are to be had. Masons are also good, but accustomed to very rough work, and in the building of furnaces it is found necessary to see practically every brick laid, as otherwise the joints are sure to be carelessly done; still, with all this, a mason will, after he has had a little practice, do fully two-thirds of the work of an English brick-layer. Mining labour, on the whole, is comparatively good, the general rate of wages being from \$0.50 to \$0.75, while the ordinary unskilled labourer receives about \$0.37 per day. Latterly the length of the day has been reduced to eight hours, the rate of pay remaining practically the same, it having become difficult to obtain a sufficient number of men, of whom at one time some 600 were employed.

As an illustration of the cost of mining in the various classes of rock met with, the following table has been compiled. The miners supply their own powder, candles, and a portion of the cost of tools. The company pay the cost of bringing out the rubbish and such timbering as may be required to keep the workings secure. The cost is calculated on the rates agreed each week for the various contracts, and is given both in running metres and per cubic metre:—

SIZE OF WORKINGS IN METRES, 1.75 X 1.25.

Rock.	Cost per running metre.	Cost per cubic metre.
Gypsum (hard)	10 to 15 equal	4.57 to 6.85
Gypsum (soft)	5 " 8 "	2.28 " 3.65
"Panino" in gypsum and limestone 4 " 12 "		1.82 " 5.47
Gypsum with quartz	10 " 12 "	4.57 " 5.47
Gypsum with altered limestone .. 8 " 12 "		3.65 " 5.47
"Almendrilla"	8 " 10 "	3.65 " 4.57
"Cuesco"	4 " 10 "	1.82 " 4.57
Limestone (hard)	12 " 16 "	5.47 " 7.29
Limestone with gypsum, "tosca" and ore leaders	6 " 12 "	2.73 " 5.47

The main galleries of larger size and winzes and shafts, of course, cost something more, shafts running up to \$20 per metre in depth, equal \$5.33 per cubic metre. It is extremely difficult to compare these costs with those of other countries, owing to the great fluctuations which have taken place in the rate of exchange, which has varied from about \$6 to the £1 sterling to over \$10 to the £1 sterling during the period embraced by the accounts of the mine. On the whole, however, I should be inclined to place the value of the work done at fully one-half that of an English miner, which (considering the poor quality of the food, and the great altitude of the mines, where the difficulty of breathing is very great whilst doing hard work) may be looked upon as a remarkably good performance.

So far as the ore is concerned, the variation in the cost of labour is considerable, as when in "bonanza" the cost is comparatively little, while in exploration work it is very high. The relative quantity, quality, and cost per ton of ore for the five years being as under:—

Year.	Quantity, Tons.	Quality, Per cent.	Cost per ton of ore.
1890	231.7	2.80	\$11.42
1891	1259.0	2.01	7.20
1892	3150.0	3.64	7.80
1893	4096.0	2.50	9.80

These figures include all the costs of mining and laying the ore down in the ore-shed, and the detailed figures are given in Table No. 1.

As regards the occurrence of the ore in the Trinidad Mine at Guadalcazar, it has much in common with the mode in which the quicksilver ores occur in the Californian mines, and also at Idria, there being a distinct fissure system, along the main lines of which the ore has been deposited. It was in following up the exploring works, determined on by the consideration of the indications in the old workings of the existence of such a fissure system, that Mr. Mackenzie was led to the discovery of the "bonanza" chamber, which yielded such large quantities of ore.

Striking out from between the "Augustias" and "Zero Levels" in a northerly direction, a drift was carried on, following a very irregular but persistent vein of ore, indications of which extended through practically the whole extent of the working, and yielding rich ore with occasional small pockets running up to 9 per cent. In places, the fissure was filled with "almendrilla," carrying ore against the walls, which were gypsum, and in places the gypsum was permeated with ore.

As depth was attained, the ore changed its character from "negro" ore, which was found in the upper levels, to "acerado" ore. The general run of this vein corresponds closely enough with the general run of the line of ore chambers exhausted by the old miners, which probably follows closely the main fissure.

The plan and section, dated March, 1893, are particularly interesting, as showing the line of workings which led to the discovery of the last "bonanza" chamber.

Sufficient exploring work has not been done beyond this point to enable it to be determined whether the ore deposits follow the same line, but, in all probability, they will be found to do this very closely. There are, no doubt, parallel fissures of much the same character, but the determination of their direction and extent can only come with the extensive development of the ground at present unknown, and for which the resources of the company (now reconstructed) should be sufficient. Such exploration work, if carried out by a properly trained and thoughtful mining engineer, is sure to yield an abundant return.

The author, having been consulting engineer to the company from its formation, is able to give detailed information in regard to the cost of working, as well as in regard to the metallurgical methods employed, and has embodied much of this information in the tables annexed to this paper.

SANTA MARIA AND COYOTE MINES.

Another group of mines is found some 20 miles to the northward, in a range of mountains lying at a considerably lower level. Here a good deal of work has been done in former times at the group called the mines of Santa Maria and Coyote, and no less than 10 native furnaces were in existence, although idle in 1890.

Water was, however, absolutely wanting. The proprietor of some wells about 6 miles away absolutely refused to allow even drinking water to be taken by the miners.

The dump heap at the mine showed stone of hard limestone and gypsum, with a good deal of crystalline gypsum, and, in the

mine itself, a large fissure filled with a soapstone-like substance carrying crystals and nodules of cinnabar was found.

Some specimens of the ore were found running up to 80 per cent. quicksilver, and it was said that only the want of water for the workmen prevented the mine being worked.

Alluvial Deposits.

In the valley of Guadalcazar itself there is an immense depth of alluvial, deeply fissured by heavy rains and cloud-bursts; in this cinnabar is found throughout the valley, and residues washed from the alluvial were easily concentrated up to 2.30 per cent. of quicksilver—the actual percentage in the alluvial, however, being very low.

A general consideration of the Mexican quicksilver deposits will show that, as compared with the known deposits in other parts of the world, the quicksilver ores of Mexico are comparatively rich. Leaving out of consideration the wonderful mine in Almaden, in Spain, which stands entirely alone as regards the richness of its ore (which is understood to average somewhere about 9 per cent.), the average richness of all the other mines will be found rarely to exceed 1 per cent.

The mines lying close to the Almaden, such as the Almadenejos, Valdeas, Azogues, Concepcion, and Registro del Entradicho (according to Sanchez Molero y Loetget), yielded ore which only averaged 0.653 per cent. of quicksilver.

The Idria Mines, in Austria, according to official figures given to the author in 1893, show an average over 14 years of only 0.88 per cent. of quicksilver.

The Italian mines of the Mont Amiata are probably still poorer than this; while the Californian mines, which have yielded such enormous quantities of quicksilver, average little over 1 per cent. of quicksilver in all the ore raised. Even the mine of Huan Cavelica, in Peru, one of the most noted mines in its day, although yielding ores of 8 and 10 per cent., only averaged from 0.8 to 1 per cent. on the total ore submitted to distillation. Compared with such figures, the Mexican mines are exceptionally rich.

A large collection of typical specimens of ore were on the table, and the following are the results of tests made on those from the Guadalcazar Mine. These do not, of course, represent the average quality of the ore obtained, but were selected as representing the various types of ore found in the workings.

Locality.	Quicksilver.
Fierroso de la Salieta	15.0 per cent.
San Guillermo	5.8 "
Santa Anna	6.2 "
Santa Elena, No. 1	12.8 "
Santa Elena, No. 4	10.5 "
San Roberto (orpiment)	2.8 "
Piedra Cenisa—rock not tested.	
Salta	7.3 "
Salieta (earthy)	9.3 "
San Guillermo (ore with black needles)	8.5 "
Santa Anna (Fierroso)	6.8 "
Pozo de la Fé	2.0 "
Santa Elena, No. 2	14.8 "

(To be continued.)

THE ROYAL OAK OF HAURAKI (LIMITED).

An extraordinary general meeting of the Royal Oak of Hauraki (Limited) was held at Winchester House, E.C., on Thursday, for the purpose of confirming the resolutions bringing the company's Articles of Association into conformity with the Colonial Law.—Mr. Stobart, who presided, said the directors regretted very much giving the shareholders so much trouble, but it was a question of passing the resolutions or endangering the possessions of the company. He had, therefore, only to ask them whether they agreed or not to the proposition.—Mr. Witheford seconded the resolution, which was carried, and the meeting concluded.

THE BALLARAT (STREIGHTS DISTRICT) GOLD MINES (LIMITED) v. ROBOTHAM.—This was an action to recover application and allotment money in respect of 2000 shares which defendant had underwritten in the plaintiff company on October 4, 1893. The underwriting letter was in the usual form, and provided that it should not be acted upon unless the company had similar undertakings to the extent of £15,000. This the company obtained, and receiving applications for 300 shares from the public, they went to allotment, and they now claimed to recover the application and allotment money. It was part of the agreement that the defendant should receive 10 per cent. in cash and 10 per cent. commission in shares. The defence was that since the underwriting letter the company had been altered from the Ballarat District Gold Mines (Limited) to the Ballarat (Streights District) Gold Mines (Limited), and it was suggested that while Ballarat was a well-known gold field, Streights district was unknown to investors. Another point taken by the defendant was that there had been no acceptance of his underwriting application.—The Lord Chief Justice came to the conclusion that the change of name was not material, and did not vitiate the agreement. He also thought the underwriting application had been accepted. Judgment would, therefore, be given for the plaintiff. It was hard on the defendant that the company had chosen to go to allotment on an utterly inadequate capital from the public; but the defendant was not entitled to sympathy; he had chosen to run the risk on the chance of receiving his commission if the company succeeded. It was a gambling transaction on his part, and if he happened to fail he must pay.—Judgment for the plaintiffs accordingly.

MESSRS. EASTON, ANDERSON, AND GOOLDEN (LIMITED).—We have received a copy of this celebrated firm's catalogue, wherein are illustrations, in high-class artistic form, and descriptions of the various classes of machinery which this firm turn out. We hasten to advise our readers to secure a copy of this catalogue, assuring them that it will be money well spent. The name of this firm is known in all quarters of the globe, and deservedly, for the machinery turned out by them is of a most excellent description, and has done exceedingly good service for whatever kind of work it has been employed. We regret we have not the space at our disposal to enumerate the varied descriptions of machinery this catalogue contains, but we are doing our duty by counselling everyone to make himself acquainted with them at first hand.

THE NORTHUMBERLAND COAL TRADE.—Work in the Northumberland coal trade is more than usually quiet for the time of year. Short time is being worked in many large collieries. Coal shipments at Blyth are very moderate, and on the Tyne tonnage is again being pretty extensively laid up. During the last three months the Northumberland Miners' Association has paid in relief for slack time and in stoppage allowances a sum of £804.

COAL MINING IN TURKEY.—On previous occasions reference has been made to the fact that the owners of the native coal mines at Heraclea, Turkey, complained that the heavy dues and charges to which they are liable prevent them from successfully competing with imported coal. The coal masters have again lately made representations to the Turkish Government on the matter, asking for a reduction of the Customs duty, and also of the railway and quay charges.

"THE STOCK EXCHANGE YEAR BOOK, 1895."—This extremely valuable Year Book, edited and compiled by Mr. Thomas Skinner, is just published. Naturally, in consequence of the extraordinary activity during last year, in company flotation, the book is greatly enlarged, the pages now numbering no less than 1376. The merits of this publication are well known. No office is certainly complete without it.

MINING IN ASTURIAS (SPAIN).

(FROM OUR OWN CORRESPONDENT.)

The Auriferous Zone and its Ancient Workings.

GIRON, JANUARY 23.

THE gold-bearing portion of this province should be explored with great attention, as doubtless magnificent results would be obtained, in view of the large number of ancient workings that exist in the quartzite belt that runs through it from north to south, and the gold that is found in the clays and gravels of the river beds, which run at the foot of these old hills.

Their ancient workers left a magnificent record, according to Pliny and other historians of the period. Their workings in the quartz lodes could not have exhausted the whole of these treasures; there must still remain far more than they ever took out.

Unfortunately all these old workings are fallen in, and covered by long years of vegetable and tree growth, and nothing remains to tell of the riches they enclose, but the debris of their little heaps, and the gold that is yearly washed down from these into the river beds.

An exploring company, prepared to outlay the necessary capital for opening out several of these, would doubtless secure results that would place some of the lately-boomed districts of the world at a disadvantage.

If these ancient workings were confined to a small district, it might be considered well to leave them severely alone, but they extend over a district lying between 42° 55' and 43° 32' N. latitude, and over 30 minutes of longitude, or over an area of 1110 square miles. This, of course, is a small item, when compared with the vast tracts owned by the giant companies of South Africa; still, there is room even in this for a grand future, and, with careful exploration, there would be a real boom of grand prospects that would yield wealth beyond the dreams of avarice. To a certain extent, there is a grouping of these ancient workings, so that their exploration would be easy and not costly. All consist of lateral workings into the mountain sides.

The best proof that they were prolific to their ancient workers is the long aqueduct, surmounting all difficulties, carried along the mountain sides, and in one instance through the mountain, from some sure source of a never-ending supply of water. These were not constructed to evolve a chimera of one of those ancient engineers, or company directors, but were for real utility to cover the necessities of their system of exploitation. Although such a long time has elapsed since their construction, these can be followed to-day throughout their run, and a relatively small outlay would give them a renewal of their use, and bring the water along them as merrily as it ran in their pristine youth.

The district is within three days by sea and land from England, with excellent climatic advantages, neither at the Poles nor in the tropics, but a pleasant land to dwell in for those who are not afraid of hard work, and of roughing it. The inhabitants are kindly, and there is no difficulty about securing all the workmen that are needed. Chestnut and oak timber is cheap and plentiful, and there are abundant supplies of water for all purposes, so that the difficulties that are generally present in opening up new fields are absent here.

The debris of some of the streams and rivers has for ages occupied a portion of the inhabitants during summer. When these waters leave the banks dry, they set to work, here and there, on the gravels and clays, washing out with their ungainly wooden pans (*maseros*), a pennyweight or more per pan per day, which they sell at the best price they can get to the rich men of their villages.

When Guillermo Schults published in 1858 his "Descripción Geológica de Asturias," he marked on his map that accompanied this several special places where washing was carried on at the time. He might have added the whole of the River Orna and Ler, up to where it joins the Navia, a portion of this, and the River Castelo, as the yearly washings were carried on in these too long prior to his examination.

The Orna, thus called from its source, in El Palo mountain, until it changes farther down to the Ler, runs at the foot of the debris banks of seven ancient workings, situated at the foot of the Sierra Valledor. These form a curve over a distance of about 2½ miles, are within the quartzite zone, in the vicinity of masses of diorite, cropping here and there on the margin of the river, and within a short distance of the syenite mass, upon which the village of Lago is built. The extensive watershed of this river and its abrupt mountain sides increase its body in winter to a mighty torrent. Waterworn gold in scales, grains, and dust, is found along its banks throughout its course into the Navia, a distance of 15 miles, and afterwards along this river's banks for a further distance of 5 miles. Careful prospecting failed to point out any other source of this gold than the ancient workings, or the weathering and washing down of the quartzites, and chloritic and mica schists of the Lago district.

The River Castelo, draining another watershed, but having its source on the opposite side of the western divisory of the Orna, is also auriferous. This passes below the debris from the ancient working known to-day by the name of "La Cueva de Juan Rata," mentioned in *The Mining Journal* of February 24, 1894.

The River Bao drains the Pusnovo mountain. Here, too, there are a number of ancient workings, and, formerly, washings were carried on yearly in this river. The River Braña, having in its vicinity three very extensive ancient workings, has, too, been celebrated for the gold panned out of its gravels. Both these rivers are tributaries of the Porcia. These workings are in runs of quartzite, which have been influenced by the Boal upheaval of eruptive masses, which run with a north-east direction from that place to the sea, a distance of 14 miles. The excavations and debris of all these show the enormous masses of stuff handled, and it is to be presumed that the results obtained were in proportion.

In the upper waters of the River Iblas summer pannings have always been carried on. Here there are no ancient workings. The gold has been transported from the weathering of the Sierra de Tablado, comprised of a continuation of the Valledor quartzites; and the gold of the washings that are carried on, on the upper reaches of the River Navia, has been brought from the weathered Sierra de Bustelo, which has an altitude of 1680 metres above sea level.

Neither in one nor the other of these are there any landmarks in the shape of ancient workings to guide one; thus exploration here will be a long and laborious work, but it will have the advantage of making discoveries in new ground, holding within it intact the treasures that have been placed there by Dame Nature. The absence of workings is explained if we bear in mind the climatic differences of summer and winter. Heat in summer, and a long winter of heavy snowfalls, a district scarcely populated, the long distance from the sea coast, and, at the time of the ancient occupation, an almost impenetrable region, comprised of mountain fastnesses and deep ravines, infested by

wolves and bears, would be sufficient to account for backwardness on the part of the occupiers in pushing their enterprises into it. Having all they could desire nearer their base of operations, under more favourable circumstances, it is not probable they would extend into such a district until these sources were about being exhausted. These they failed to exhaust, and when the time arrived for them to go and leave all, they did so without penetrating any farther.

There is in all this an ample field for operations that may be expected to yield grand results.

REVIEWS.

A Treatise on Mine Surveying. By Bennett H. Brough. Fifth edition, revised. (London: Charles Griffin and Co., Limited, 1896. Price 7s. 6d.)

The very fact that we are called upon to review the fifth edition of a work such as the one now before us, the subject of which interests a comparatively limited number of persons, is the best possible criterion of the value and quality of the work. The book in itself is so well known that we need say but little about it; it has proved itself a valuable text book; the best, if not the only one, in the English language upon this subject that can safely be put into the hands of a student. It is not too much to say that anyone who has mastered the contents of this work, knows theoretically all that he need know to be a thoroughly efficient mine surveyor; of course, the practical skill in applying his theoretical knowledge which forms the other essential element of the art can only come with actual practice.

The changes and additions in the present volume are few and unimportant. A chapter has been added on "photogrammetry," which rather clumsy word is used to express photographic surveying. This method, although still in a rudimentary state, promises to be of great value to travellers and explorers, who wish to obtain without excessive delay the materials for making approximately correct maps of the country they may traverse. It may be described as a kind of automatic plane table survey, which bears the same relation to true plane table work that the "Kodak" does to the sketcher's pencil. If only suitably situated views are photographed, the rest of the work can be done at any time thereafter. It need hardly be said, however, that whatever may be the importance to which this method of surveying may attain in the future, the last person to be benefitted by it will be the mine surveyor, for very obvious reasons.

We notice, amongst other novel points, that Mr. Brough has touched upon surveying for aerial tramways and their construction. This is, of course, somewhat outside the scope of a work in mine surveying, and it is unfortunate that the author has ventured upon this "oblique offset," as his statements on the subject are not quite as accurate as they might be. The Otto system is not, as might be inferred from his remarks, the most modern or the most improved system of wire ropeways; it has, indeed, considerable difficulties in holding its own with some of the better single rope systems, and Mr. Brough has been unfortunate in the example he has selected of the system he seems to prefer. It is well known that the Otto wire ropeway on the Sheba Mine has been anything but a brilliant success. Fortunately, the method of surveying for an Otto ropeway is precisely the same as that of surveying for any other kind of wire ropeway. The first step is to secure an accurate plan and correct profile of the ground over which the line is to be carried; usually, several such lines are surveyed, and the plans and sections submitted to the makers of aerial ropeways for them to base their tenders upon, and the mining engineer is rarely called upon to do more than make the surveys. It will not be the fault of Mr. Brough's book if he does not know how to execute these, or, indeed, any other kind of surveys that he can in fairness be called upon to undertake.

The Miners' Pocket-Book. By C. G. Warnford Lock (Second edition, revised. London: E. and F. N. Spon, 1896.)

We have received the second edition of Mr. Lock's *Miners' Pocket-Book*, a little volume which claims on its title page to be a reference book for miners, mine surveyors, geologists, mineralogists, millmen, assayers, metallurgists, and metal merchants all over the world. The above is decidedly a "tall order," and he would be a wonderful man who would be capable of compressing all that the before-mentioned list of persons want to know within one small pocket-book. Candidly we do not for a moment think that the book before us has achieved this; it would need to be a curious kind of metal merchant, or of mineralogist, who would be, we will not say satisfied, but even greatly assisted by this volume. It would be quite enough if it were a complete and thorough miners' pocket-book. The miner, who is so often called upon to travel into out-of-the-way corners of the globe, difficult of access, needs more than any man to have one or two handy little books that he can carry anywhere with him. This book is of that description, but it must be added that the miner's needs have been well catered for in this direction of recent years, and Mr. Lock's book cannot fairly claim to take first rank amongst a large number of similar productions. We would be inclined to lay down as the first canon for the compilation of a good miners' pocket-book, that it must not admit anything that has not stood successfully the severest tests of practical experience. No sin of commission is half as bad as that of misleading or even of running the risk of misleading. Far better no formula at all than a formula that may prove to be unsound because insufficiently tested. And if this be true of formulas, it is far more so of processes and apparatus. We regret to say that Mr. Lock errs very decidedly in this matter, and that several of his descriptions read like puffing advertisements pure and simple. To take a case in point. We should certainly, in any pocket-book for miners, expect to find a short account of safety lamps, their principles, and the points to be observed in examining or testing them, together with a list of such well-known lamps as the Davy, Clanny, Mueseler, Marssaut, &c., and their chief advantages and disadvantages. Instead of this, all we find on the subject is a couple of pages devoted to a highly-coloured eulogy of the "Thornbury" lamp, a lamp which, as far as we know, has not been adopted in any district or even important colliery, and which has several grave disadvantages that are held by practical miners to counterbalance very largely its undoubted advantages; none of these disadvantages are, however, alluded to here. This is only one instance out of a good many we could quote, in which Mr. Lock's opinion seems to have been biased, or to have been adopted without due investigation. We need not dwell on the numerous omissions that we have noticed, but should add in fairness to the author that these are most difficult to avoid in such a work. Mineral statistics are, however, conspicuous by their absence. We perceive that this edition is said to be revised, although we do not notice that the body of the book has undergone much revision. We should advise the writer at the next revision to cut out three-fourths of his descriptive letter-press, and to treble the number of tables; for what miners principally look for in a book of this description is information of a precise kind, chiefly, indeed, numerical (which cannot well be carried in the head), and presented in the most condensed and most readily available shape—namely, in a tabular form.

THE ORIGIN OF MALACHITE.*

Observations in an Abandoned Copper Mine.

By EDGAR HALL, Rivertree, N.S.W.

IT is now generally conceded by mineralogists that the oxidised portions of mineral lodes represent merely the weathered conditions of the originals, and that the oxide, carbonate, and sulphide minerals contained therein have been formed by atmospheric influences alone.

Very few men of experience in the everyday working of mines still think that these influences have been abnormal at any time. All the phenomena can be explained by the changes which are now going on, and present atmospheric conditions are ample to produce the weathering seen at the largest of mines. Such being the case, abandoned mines offer an interesting field of study to a mineralogist, as their workings expose large surfaces to the action of air and water.

Numerous as are the abandoned mines of New South Wales, the number available for examination and likely to yield valuable information is small. This is due to two reasons; one, that the mines have not been abandoned long enough; the other that most of the mines are situated in the eastern coast ranges where the rainfall is high, and consequently the mines get filled with water to a point very near the surface. It is obvious that a comparatively arid climate, or one where long periods of dry weather alternate with periods of heavy rainfall, is required to produce large masses of oxidised ore bodies. Such a climate obtains in our far western districts, and accounts for the large bodies of oxidised ore found at Broken Hill, Cobar, and other well known places.

In such a climate oxidation proceeds very rapidly. Iron pyrites, where occurring in large quantity, will, in four or five years, produce such a plentiful crop of crystals of iron sulphate that the sides and floor of a drive will be covered as if by snow; so much so that the sounds of one's footfall is muffled as one proceeds.

The writer had occasion, a short time ago, to visit the abandoned workings of a copper mine, and the observations made there are the subject of this note. The mine in question is situated at Giralambone, in the western part of the colony, about 100 miles from the Darling. The ore occurs as a copper-bearing schist, and where unaltered is a bluish micaceous rock, carrying strings and blebs of a pyrites poor in copper. Permanent water stands at a depth of 180 feet, and above this level the rock is soft and weathered, and the copper occurs in agurite and malachite, with a little oxide of copper. Copper glance is said to have been found there in the early days.

The agurite and malachite occur mainly as nodules of varying size; these are not pure carbonate of copper, but are earthy, and consist of portions of schist which have been saturated with the mineral. Malachite occurs also as narrow strings of pure carbonate of the fibrous variety. It is to this I wish to draw particular attention.

Between the surface and water level a great deal of excavation has been made in the schist, and these excavations can now be examined in safety. Most of them have been standing so for 13 years past. The workings are very dry, and crystals are not very plentiful, but in one crosscut, where there appears to be a drainage channel, the sides and roof are covered with particularly fine and long crystals and sulphate of copper and sulphate of iron, some of the crystals being 1½ inch long.

Further investigation showed that the schist in the crosscut was full of crystals and copper sulphate. The crystals had formed in the foliation planes of the schist, and were closely-packed bundles of very fine fibrous crystals completely filling the fissure. In most cases the crystals were at right angles to the sides of the fissure, but in some cases the fibrous crystals had become curved, and had forced a layer of schist outwards into the drive. The crystals were of a brilliant blue colour, and, of course, were very brittle; but in other respects the resemblance to fibrous malachite as seen in the schist at other places in the mine was complete. The resemblance at once suggested the origin and fibrous malachite—namely, that it is a pseudo-morph after sulphate of copper. The ordinary text-books of mineralogy seldom hint at the method of formation of minerals, and in the case of malachite the writer has so far been able to find only one explanation of its formation. Frank Suttay (*Mineralogy*, page 211) suggests that the mineral "has in most cases resulted from percolation of water through copper-bearing rocks, and the subsequent deposition of the dissolved carbonate in fissures and cavities." This explanation seems improbable in view of the insolubility of copper carbonate. Watt's dictionary of chemistry (new edition) states that the basic carbonate requires a pressure of 4 to 6 atmospheres for solution in water containing carbonic acid. Such pressures are impossible under natural conditions at the short distance from the surface within which malachite is found.

The deposition from solution also pre-supposes the formation of the carbonate from the chalcopryite, which must have formed its starting point, and this presents equal difficulties.

The production of sulphate of copper from cupreous pyrites is the first and simplest result of oxidation, and from sulphate of copper any soluble carbonate will, at ordinary temperatures and pressure, produce a basic carbonate of the composition of malachite. Verdigris, the product of slow oxidation of metallic copper in moist air at ordinary temperatures, also has the composition of malachite, but it is hardly likely that the alteration of cupreous pyrites will follow that route.

Given the oxidation of cupreous pyrites by surface influences, and the formation of fibrous crystals of sulphate of copper in cavities of a lode during a prolonged period of dry weather, it is easy to understand that during the ensuing period of wet weather the descent of waters from the surface, charged with carbonic acid and carbonate of lime, will change the sulphate crystals into malachite; and that this alteration will proceed without change of form is highly probable. That this has been the mode of formation of the fibrous malachite in the cupiferous schists of Giralambone the writer has no doubt whatever, and he believes that the explanation will hold good for all occurrences of the mineral.

The following is suggested as the series of changes which produced the carbonates of copper:—

(I.) A period of wet weather during which the rocks and ore formations within surface influences become saturated with, and all cavities full of water.

(II.) A period of dry weather. At first the excess of water drains off rapidly, leaving the rocks merely wet all through. As the drying proceeds oxidation of the damp minerals goes on very fast and sulphates are formed. The flow of water is insufficient to carry these far, so they saturate part of the adjacent earthy minerals, and also effloresce in cavities, particularly where there is a current of air. Finally, at the end of the dry period the sulphates will be left as such, forming quite dry mixtures with other substances, and incrustations or crystals in cavities and fissures.

(III.) Another wet period arrives. At first the descending

* A paper read before the Royal Society of New South Wales, December 15, 1895.

water permeates slowly and is saturated with carbonic acid and soluble carbonates, the slow soaking of which over the dry sulphates convert the latter into carbonates. As the volume of water increases the CO_2 and soluble carbonates become less but the sulphates will have been already converted into carbonates, so they are not dissolved. Finally the rock becomes saturated with water, the wet period passes away, and another cycle of change commences.

Every cycle will add fresh layers of carbonate to the incrustations, and fresh crystals to the fibrous bundles in the cavities; until at last solid masses of coveretionary and fibrous crystalline malachite result.

MEETINGS OF MINING COMPANIES.

COOPER'S AUSTRALASIAN EXPLORING COMPANY, LIMITED.

THE first ordinary general (or statutory) meeting of shareholders in the Cooper's Australasian Exploring Company (Limited) was held on Tuesday, at the office, 110, Cannon-street, the chair being occupied by Mr. GEORGE CAWSTON.

The SECRETARY (Mr. E. Eltham Johnson) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—This is, as you are aware, merely the statutory meeting of the company, but I think it will be of some interest to you if I give an account of the formation of this company. About two years ago Mr. Cooper told some friends of his that he was willing to go out to Western Australia, if they would form a small syndicate on condition that he and his partner, Mr. Woodhouse, should have half the profits of the company. A small syndicate, with a capital of £1200, was accordingly formed, and that syndicate succeeded in acquiring one or two very good interests in West Australia, which have returned a profit, at the present market prices, of something like £20,000. The satisfactory results attained by this syndicate led Mr. Cooper's friends to suggest the formation of a larger company, to enable him to deal on a more extended scale with the important interests which are now coming forward in connection with West Australia, and this company, which was intended to be a development of the original syndicate, has on account of the interest which has been manifested in it by many of Mr. Cooper's friends, become a more important concern. It was registered with a large capital—perhaps larger than was necessary at the time—but there was always a considerable amount held in reserve, which was useful for acquiring properties, but the amount of £70,000 subscribed is available in cash for the purposes of the company. This is only the statutory meeting of the company, which, as you know, takes place within four months of the formation of a company, and, therefore, there has not been time for the directors to have done much business; but they have acquired seven mining leases, and options in some of the best districts in Coolgardie, and these are being developed prior to flotation. Two others have also been sold to gold mining companies on terms which show a very good profit to this company. The company has also acquired a very valuable property in New Zealand in the Thames district, near Auckland. It is a mine that has been worked for some years, and the directors were advised that it only needs a small additional capital to make it profit-bearing at once. The machinery is in excellent order, and a large quantity of tailings were included in the purchase. There are many mines which had to be abandoned a few years ago and can now be worked, and are being worked, on account of the various processes which have been discovered during recent years, and the interest which is now so much more general in mining has led to capital being subscribed for the purpose of working properties formerly abandoned. Of course, the same thing has taken place in connection with the old mines in India, where the former workings had been abandoned, but where by new machinery they had been enabled to recommence the work of development and to make large profits. In the same way the ancient workings have been followed in various parts of the world, but in this instance we are only following the first efforts of the Australian pioneers during the fifties and sixties. The company has also a large interest in the Crown United. That is a mine in the Black Flag district, and Mr. Woodhouse, of the firm of Messrs. Cooper and Woodhouse (who are established over there as the agents of the company) has been travelling in various parts of Western Australia, and has been acquiring some options in a new district—the Niagara district—which bids fair to become one of the richest districts in that colony. I have a number of reports on this property, which I think of sending to the papers, so that, as you will see them there, they may be taken as read. I think there is really nothing more to be said at this time, except to inform you that we are all large shareholders in the company, and that we intend to do our best to make the enterprise a great success. (Applause.)

One of the reports referred to by the CHAIRMAN was by Mr. G. S. Zealand, with reference to the Moanatairi Gold Mine, Thames, New Zealand, as follows:—"100 feet level below main adit tunnel. The western drive on No. 2 reef has been advanced 50 feet, and I am pleased to say gold has been seen freely through the stone for the entire distance. There is still 50 feet to drive to the boundary, which will give a block available for stopping 100 feet in length by 80 feet in height, and as the reef averages from 3 to 6 feet in thickness, there should be a fair supply of payable ore forthcoming for some time to come. In the eastern section towards the main fault, on this same reef, much better grade stone is being met with, and I am very hopeful of having a payable block in hand here also. On No. 4 lead there is now 150 feet in length by 100 feet in height open and available for stopping; the average width of this lead is from 2 to 3 inches. Some really good specimen stones have been got from the last stop taken along, and there is every indication of a continuance of the same class of ore as the stopes ascend. In consultation with Mr. E. A. White, it was decided that the following new works which I recommended are to be gone on with immediately after the holidays:—The Jet in Time, or what we shall in future call the No. 2 shaft, will be cut down and made large enough to admit of the haulage of the main adit tunnel trucks through it. This will do away with a second handling of the material broken out, which will then be conveyed direct from the face to the muck-lock tip or the crushing battery. To admit of this being done, a crosscut, 480 feet in length, will be driven from the main adit, and connected with the shaft. This shaft is most advantageously situated, not only for the future working of the whole of the company's ground (as it lies to the westward or seaward side of the main fault), but also for proving the eastern continuations of the Caledonian Nos. 1 and 2 reefs, through or under the fault, where in all probability a new strata of golden country will be met with. I purpose sinking a shaft 500 feet, at which depth the above-mentioned lodes will be intersected; the main fault should be met with here, and by driving through it, and picking up these lodes on the eastern side, a depth of over 900 feet will be obtained, and should the theory which I hold be correct, that the section of our gold field seaward of the fault is an upheaval, the section of the country corresponding to that from which nearly all the richest deposits of gold have been obtained, will be found at or about this level eastward of the fault. The Nos. 1 and 2 reefs will average from 3 to 6 feet in thickness, and from the bottom level of the No. 2 shaft there will be 180 feet of backs with 200 feet in length on lines of lode to westward of fault. This being one of the best sections of gold-bearing country on the field, it will be singular, indeed, if there are not some rich deposits of gold discovered.—150 feet level. A crosscut north to intersect No. 2 Mureka lead will be started; also a drive west on All Nations lead. In the carrying out of both these works there is a good chance of picking up the continuation of the old runs of gold worked on the higher

levels. These lodes average from 1 foot to 3 feet in thickness, and are very highly mineralised. A drive of 180 feet in length will be driven from the footwall of No. 4 lead and connected with No. 2 shaft. This will ventilate the latter, and also cut two gold-bearing lodes, which are intact from this level upwards.—Point Russell or upper adit level. The drive east on the Golden Age reef, which is at present in progress, will be pushed ahead more vigorously, and a winze will be sunk from the upper level for ventilation. The carrying out of these works should open up a large block of payable ground, as the reef averages from 3 to 15 feet in thickness, and sheds off many smaller veins which no doubt will prove payable when traversing through good sandstone country.—100 feet level. The south crosscut on this level will be repaired and extended 340 feet, at which distance the Waitohi reef will be intersected. This is the largest lode in the company's ground, and has never been prospected. For many years past it has been a contemplated work, but the lack of funds always prevented the work being gone on with. The eastern drive on the Reuben Parr reef will again be manned. There is still over 800 feet to drive on this lode through a splendid gold-bearing channel of country, and as many leads branching off it will, no doubt, be met with, the chances of opening up an entirely new and profitable section of the mine are, I consider, very good. The work of developing the Cambria or Waitohi large lode will not be gone on with just yet. The lode dips into this company's ground at a depth of 200 feet below the main adit tunnel, and is entirely intact from that level downwards. It is a large body of quartz averaging over 12 feet in thickness, and where the rich deposit was obtained in the Cambria Mine (60 feet from this company's ground) it expanded to over 20 feet in width. In conclusion, I may say that I have no hesitation in recommending the carrying out of the above works, feeling sure that the result will prove profitable to this company. The latest accounts show that the gold recovered during the development stage will largely contribute to the cost of the works."

On the motion of Mr. CRITCHETT a vote of thanks was given to the Chairman and directors, and the proceedings terminated.

MOUNT MAGNET GOLD MINING COMPANY, LIMITED.

Quartz ready for crushing.—Favourable assay.

The statutory general meeting of the Mount Magnet Gold Mining Company (Limited) was held on Monday, at the Cannon-street Hotel, E.C., Mr. M. M. MOORE (the Chairman of the company) presiding.

The SECRETARY (Mr. J. Darie Pattallo) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—I have noticed that there is a custom prevailing amongst Chairmen of mining companies of late to give at the statutory meeting the fullest information they themselves possess of all that has transpired during the four months of the company's infancy, and that course I propose to take to-day. Our company was registered on October 5, 1895, and on the 9th the prospectus was issued. The issue was made at a time when there was a little disturbance in the mining market, but we kept the list open for three days, and as the working capital had all been fully and responsibly subscribed, we did not feel it necessary to keep the list open any longer. The public responded very well indeed, and we went to allotment with our working capital, and with very fair prospects ahead of us. We then occupied ourselves with completing the transfer of the properties; this was finally completed on December 20—a much shorter time than I have known elapse in getting properties out there transferred. That being done, we carried out certain arrangements with a gentleman whose name you have seen on the prospectus—Captain Richard Piper. We thought it better than having a managing director there to have a manager, and, after careful investigation as to Captain Piper's record there, and from references given us here, we decided to appoint him our manager, and give him the charge of our property. We induced him to accept the post of exclusive manager for our property. Many men manage several properties, and inspect them from time to time, but we have Captain Piper's sole services in our employment. (Applause.) We managed this at a moderate salary compared with the salaries mining managers have been getting of late. Since his appointment he has been engaged principally in sinking, driving, and developing the property, and from the reports we get from him we learn that he is proceeding very satisfactorily indeed. The last letter we received from him was dated December 21, which is about as recent as you could hear, except by cable. Captain Piper had been manager for the Broken Hill South, and, from his knowledge of the property, he wrote for a considerable number of shares for himself and friends—an evidence of his belief in the future of the property, for there was no man more capable of judging than himself. (Applause.) Our policy of development has been to a certain extent cautious; we are entrusted with the handling of the money of the shareholders as well as our own, and we wish to do nothing hurriedly or rashly. We have ordered some machinery for pumping, hoisting, and winding plant, and a steam boiler to enable the main shaft to be properly sunk, and in sinking that shaft the returns from what stuff has been taken out have been highly satisfactory. We have also had specifications from Captain Piper of the larger plant which will be required—the stamps and crushing machinery—and we have had estimates from competent parties on this side, and also from Adelaide, Melbourne, and different parts of Australia. We have these matters under consideration, and as soon as we think the property is sufficiently developed, the negotiations will be carried through, and the proper plant placed upon the property. The one crushing that we had made out there at the Morning Star was 13 tons of quartz, which gave us 2 ounces to the ton. Captain Piper states in his last letter to us that they have got out stone and quartz sufficient to produce a crushing of £6000 worth of gold. That is ready to be got out as soon as we have our machinery erected. From enquiries, and from what we hear of the Murchison district, we think we are fortunate in having a property in that particular district. The water question there is not as formidable as in Coolgardie and other parts of Australia, and we have no complaints and no anticipations of any difficulty at all arising from want of water. The railway is now being rapidly extended, and in a short time we shall have railway communication there, and further down the coast, and the facilities for shipment and other matters which enter largely into the value of mines, and so forth, we find we have ample reason to suppose we have to as great an extent as we require. I think I cannot do better than read you the last letter from Captain Piper. He writes on December 21 as follows:—"Gentlemen: I have the honour to furnish you with the following report of the proceedings at the mine since the 1st of October last. After taking over the property from the vendor, on your behalf, I proceeded to the Warden's office, Ose, and on the 4th of the same month had the leases (6 acres and 19 acres respectively) transferred to Messrs. Parker and Parker, your solicitors, at Perth. On my return I immediately commenced active operations by continuing the stoping of a block of ground between the main and south shafts. On the completion of this work the permanent stall was fixed and the ground secured. The lode in this block carried from 18 inches to 3 feet 6 inches in width, yielding battery material of 2 ounces value. At times there was visible gold of a crystalline nature, which, I may say, is a rare feature in this locality; 30 tons of stuff taken indiscriminately from this stop and treated at the Morning Star Crushing Company's works yielded 52 ounces retorted gold, which I am sending to you through the Union Bank—a return which, though not up to my expectation, cannot but be considered highly satisfactory when the losses of fine gold in the tailings, &c., are taken into account. This return bears out my early report, which you will note gave a general average of 35 dwts. per ton. The next work accomplished was the cutting down—that is, enlarging the main shaft to such a size as to enable us to work the mine on a large scale

at great depths. My first intention was to make the shaft 7 feet long by 4 feet wide within timber. This would give us a pumping compartment and only one winding compartment. Since then the developments have been such by the opening up of parallel veins that I have decided to increase the size of the compartment to 10 feet by 4 feet; this will give us two winding compartments, and so enable us to hoist the stuff more economically from all parts, as the main shaft will eventually be connected by crosscuts at the various levels. I have cleaned up the bottom of the shaft to the 125 feet (water level) and opened a chamber, and commenced to drive north on the course of reef, which is 2 feet wide; there are patches of iron and copper pyrites showing. The presence of these minerals speaks well for the permanency of the mine. We have sunk a shaft 140 feet north to a depth of 60 feet; it is almost vertical with a slight inclination to the east. The average width of formation is 3 feet, carrying about 18 inches of stone of equal value with that won from the slope at main shaft. A drive is being commenced south to connect with the main workings, and is extended 18 feet, producing lode material of same quality as above. At this level the crosscut has been started in a westerly direction to intersect the auriferous dyke. To the east of these workings, on the 19 acres lease, I have opened up two parallel reefs. On the one nearest the main workings a shaft has been sunk to a depth of 40 feet, exposing a reef 5 feet wide, yielding a good battery stone. On the reef beyond this, at 45 feet down, I am driving on the course of lode, which is at present producing material of 15 dwts. or thereabouts.—Water. At 125 feet we have a supply of really good water, comparatively free from insoluble, sufficient to meet present requirements, and directly the pumping machinery is on the ground I shall proceed forthwith to erect same and resume sinking for a supply for metallurgical and boiler purposes.—Mining, timber, and firewood. The timber for engine shaft, cage-roads, casing and divisions, stays, &c., must be procured from the saw-mills at the seaboard, and that required for stalls, logging of passes, tramroad sleepers and general underground work from the immediate neighbourhood. I have commenced the cutting and carting of firewood with our own teams and labour, as I am persuaded that this would be a saving to the company, the woodcutters and teamsters having raised the price from 3s. to £2 per cord.—Buildings and improvements. We have erected two rooms of sun-dried bricks, which for the present serve as store, office, and manager's sleeping apartment, also a brush shed and stalls for the whip horse and others employed carting firewood. There are also sheds for the smithy and carpenter's shops; the latter will serve in the meantime until we arrive at a more advanced stage. During the three months you have had the mine in your possession I have blocked out ground on the main reef alone which should produce 1000 tons of quartz, and this ought to yield a gold value of £6000. This estimate is based on the recent crushings of 30 tons after deducting a fair percentage for contingencies. At present there is a difficulty in securing the services of good practical miners. After the Christmas exemption I expect a contingent of competent workmen from Broken Hill and Charters Towers, whom I shall set to work to exploit the reef towards our southern boundary. So satisfied am I that the property is everything I described in my early reports, and that the values were not inflated, that I had no hesitation in resigning my position as manager of the Pearl and New Cham South Gold Mines and accepting your offer, notwithstanding the restrictions attached to it. I am engaged in the preparation of surface working, longitudinal and transverse sectional plans of the mine for the London office, which will be forwarded next month.—Yours faithfully, Richard Piper, general manager." That is a succinct history of the work done by the general manager during the last four months, and my colleagues and myself hold it to be exceedingly satisfactory. (Applause.) We have every expectation that the hopes we indulged in when we entered on this enterprise will be realised, and there has been nothing in the examination of affairs that has at all shaken our confidence in the Mount Magnet Mine. We have also had the following cablegram, dated Jan. 31:—"Driving through good ore . . . main . . . reef has an average assay value of 2 ounces 10 dwts. per ton. . . 2 feet 3 inches . . . auriferous deposits . . . assays 25 dwts. per ton. . . Have sent the plans of . . . cages . . . poppetheads . . . the mine continues to look . . . very well . . . In my opinion the mine will develop into a fine property." The Chairman also submitted the following interview with Captain Piper, taken from the *South Australian Register* of Dec. 24 last:—"Captain Piper has just returned from the Murchison to spend the Christmas with his family at Glenelg. He is manager of the Mount Magnet Mine, which has only recently been acquired by a strong English company. Captain Piper stated:—"On the Magnet, which consists of 25 acres, there is a good-looking quartz reef enclosed between diorite walls, and three trial crushings, ranging from 30 to 50 tons each, have given a little over 2 ounces to the ton. There is also an auriferous dyke, bearing at an obtuse angle from the reef. A trial crushing from this of about 40 tons yielded 1 ounce 8 dwts. per ton, thus giving a general average from both sources of 1 ounce 15 dwts., and as I can make 8 dwts. pay the working expenses, you will see that there is a handsome margin for profit. I consider this gold-bearing dyke of friable schistose rock a most important feature, as it can be mined and milled at minimum expense. The quartz reef also is in good workable ground. The main shaft is down to water level—125 feet, and the water is found to be excellent for both metallurgical and boiler purposes, being almost entirely free from insolubles. This shaft is about to be equipped with a powerful winding and pumping plant, and a 20 head battery erected at once. The Mount Magnet gold is of good quality, and is worth within a fraction of £4 an ounce at the Melbourne Mint. In the first place, the reefs are nearly vertical, and there is no better assurance of permanency than that, and the transition being so gradual and pronounced from surface to water level is also an excellent feature. When the Murchison reefs were first opened the opinion was expressed that they would become too poor below water level to be worked, but this theory is capsize by the fact that the New Cham Mine is down 170 feet below water level, and the reef at that depth is still rich. Another good feature for permanency is that the reefs below water level carry both iron and copper pyrites. It is expected that the railway from Mullewa, which is the present terminus from the seaboard, will reach the Murchison reefs, a distance of 200 miles, in 12 months' time, as there is not the slightest engineering difficulty to be encountered. We have one grand thing in our favour, and that is an abundance of good water, and we know that there is an unlimited supply of at least 1 ounce stone. So, take my word for it, there will be many big fortunes made out of the Murchison gold reefs."

The CHAIRMAN remarked that the directors were much indebted to Mr. W. H. Barker, who had a long experience of Australian matters, for the advice and assistance he had given the directors. (Applause.)

The proceedings terminated with a vote of thanks to the Chairman.

NEW HAUBAKI GOLD MINING COMPANY (LIMITED).

An extraordinary general meeting of the New Haubaki Gold Mining Company (Limited) was held on Tuesday, at Dashwood House, Mr. H. Wilson in the chair, when resolutions were adopted altering the Articles of Association, so as to give the directors power to establish a local register of shares in New Zealand in compliance with the provisions of the Mining Laws Amendment Act of 1895.

SCOTT'S HAUBAKI GOLD MINING COMPANY (LIMITED).

An extraordinary general meeting of shareholders in Scott's Haubaki Gold Mining Company (Limited) was held at Winchester House, E.C., on Tuesday, for the purpose of confirming the resolutions previously passed amending the Articles of Association of the company, so as to comply with the new Colonial Law passed.—Mr. F. G. Lane, who presided, briefly moved the necessary resolution, remarking that the operations of the company were going on satisfactorily. The financial position was sound, and they undoubtedly had a very excellent property.—Mr. J. E. Rash seconded the motion, which was carried unanimously.—The proceedings then terminated.

GREAT BOULDER PERSEVERANCE GOLD MINING COMPANY, LIMITED.

The statutory meeting of the shareholders in the Great Boulder Perseverance Gold Mining Company (Limited) was held on Monday, at Winchester House, Mr. E. S. REVERT (the Chairman of the company) presiding.

The SECRETARY (Mr. W. Armstrong) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen—You have heard the notice read calling together this meeting, and from it you will have gathered that this is our statutory meeting, called to comply with the Act of Parliament, and, therefore, it is purely a formal meeting. On these occasions it is not usual to go very profoundly into matters connected with the company, for the reason that the time that elapses between the formation of the company and this meeting is so short that directors of West Australian properties are not in a position to render so full an account as they would otherwise be able to do. However, our position to-day is most encouraging, and I shall be able to read to you extracts from Mr. Zebina Lane's reports and letters, which, I think, you will consider very satisfactory. The property is, as you are aware, part of the belt of gold-bearing formation on which is situated the Great Boulder, Lake View, Great Boulder North, and Boulder East, and the Associated Gold Mines. The capital of our company is £175,000, comprised as follows:—125,000 shares were paid to the vendors, 20,000 are held in reserve, and 30,000 are kept for working capital. I may add that this 30,000 was underwritten free of all expense to the Great Boulder Perseverance Company, and at the present moment we have £27,000 in the bank, and the other £3000 has been sent out to our manager in Western Australia. Considerable development work has been done on the mine. Several shafts have been sunk at different points along the line of reef, showing, as Mr. Lane tells us, splendid prospects. The principal shaft, which is about 500 feet west of the Lake View line of lode, has been sunk to a depth of about 100 feet, and at 50 feet from the surface a leader showing fine gold was passed through. A north drive on the course of this leader has been driven to a distance of 28 feet. Samples of this lode, which, Mr. Lane tells us, is improving in size and richness, give an average of 3 ounces to 5 ounces per ton. Mr. Lane also states that at 80 feet from the surface a nice-looking leader came in from the west showing good gold. This leader is about 20 inches in thickness, and is improving as the shaft goes down. This has reference to No. 1 shaft. No. 2 shaft has been sunk to a depth of 50 feet through the Lake View line of lode. A crosscut east at this level has been driven to a distance of 14 feet to prove the thickness of the lode, which Mr. Lane tells us is 10 feet wide, and a drive north on the course of the lode has been driven 29 feet, the lode improving in size and richness. The drive south has been put in 18 feet, and the lode here is from 9 to 10 feet wide. No. 3 shaft has been sunk about 50 feet, and at about 46 feet from the surface the lode was cut, and from trials by dish very fine gold was found. I think by now a hauling engine has been erected on this shaft. On Nos. 4 and 5 shafts I do not think very much work has been done as yet. No. 6 shaft, which is sunk on the Lake View line of lode, has reached a depth of about 40 feet. This shaft is about 250 feet north of No. 2 shaft, and at 40 feet a bar of diorite was met with. The lode is about 7 feet wide, carrying good gold. A drive south on the course of the lode has been driven a distance of about 20 feet, and the lode shows gold throughout the whole length of the drive. I think I have explained to you, as well as I am able, the state of the arrangements made by Mr. Zebina Lane for the development and working of your property. It only remains for me to say that Mr. Zebina Lane and your directors have the greatest confidence and belief in the value of the property, and I believe in the colony the Great Boulder Perseverance is considered one of the very finest and richest mines out there. Of course, Mr. Zebina Lane has been hampered, like everyone else there, by the scarcity of labour and the scarcity of water, but at the mine now we have condensing plant so as to enable us to condense water both for mining and domestic purposes. We have on the mine, too, a very good office, store room, and a blacksmith's shop, and Mr. Lane tells us that everything is in very good working order. From Mr. Lane's letters we gather that he will be in a position to commence crushing about March. Before concluding, I cannot help saying how we, my co-directors and myself, congratulate ourselves on having the services and advice of Mr. Zebina Lane. It is unnecessary for me to tell you his merits as a mining engineer, as I suppose he is better known than any other mining engineer in Western Australia, and his reputation there is second to none. He himself feels most confident of the success of your property, and that it will turn out in the front rank of the gold mines of Western Australia, and be a source of great profit to all of us. If there are any questions any gentleman would like to ask, and it is possible for me to answer them, I shall be very pleased to do so. (Applause.)

The CHAIRMAN, speaking in answer to a SHAREHOLDER, who asked whether the water was fresh or salt, said the water at the mine was brackish.

Mr. HISLOP asked what was the position of the property in regard to the Great Boulder. Was there any probability of the Great Boulder lode traversing the Perseverance property?

The CHAIRMAN said it was impossible to say at present whether it did or did not. There was no connection between the Perseverance Company and the Great Boulder Company, except that Mr. Lane was the engineer.

Mr. HISLOP further enquired whether Mr. Lane had expressed any opinion with regard to the matter.

The CHAIRMAN replied that Mr. Lane considered that he had got the reef, and at the present moment was sinking a shaft to find out.

Mr. HISLOP proposed a hearty vote of thanks to the Chairman and directors, and expressed the hope that they would have satisfactory news to give to the shareholders at the next meeting.

The vote having been seconded, it was unanimously accorded.

The CHAIRMAN briefly replied, and the meeting terminated.

THE KOMATA REEFS GOLD MINING COMPANY, LIMITED.

An extraordinary general meeting of shareholders in the Komata Reefs Gold Mining Company (Limited) was held on Monday, at Winchester House, the chair being occupied by Mr. HENRY WILSON, for the purpose of passing resolutions amending the Articles of Association, so as to bring them into conformity with the new Colonial Law.

The SECRETARY (Mr. W. J. Lavington) read the notice convening the meeting.

The CHAIRMAN, in moving the resolutions embodying the alterations, said: Gentlemen—The notice that you have heard read by the secretary will have informed you as to the object for which the meeting has been convened. In the colony of New Zealand three Acts have been enrolled on the Statute Book, which are applicable to the mining industry—those of 1891 and 1894, and the Act recently introduced in 1895, by which both have been partially amended. The various provisions of that Act, as understood here, do not in any way infringe upon the rights or privileges of shareholders in this country, the object merely being to facilitate local dealings in the company's shares. In the event of residents in the colony possessing shares in the company a local register will be opened, so that they can have an opportunity, if they so desire, of having their names transferred from the London register to the local register. That, I think, is the only explanation it is necessary to give as to the resolutions before you, and I have given it you because some people felt rather alarmed lest the provisions of the new Act might interfere with the rights and privileges of shareholders in this country. Nothing of the sort is contemplated.

The resolutions having been duly seconded,

The CHAIRMAN gave a statement as to the company's property, in the course of which he said: The Komata Reefs property, as you know, is situated in the Haaraki gold field, and in the Thames district of that field. It is easily approached by crossing the Firth of Thames to the township of Thames. The company, as you may remember, is very little loaded as regards the capital upon which it has to earn dividends for you, the amount being only £50,000. You possess an area of 84 acres, for which you have only to pay an annual rental of £41. Your claims consist of the Komata proper claim of 30 acres, the A 1 of 19 acres, the Queen's Birthday of 30 acres, and the Machine Site of 5 acres. That is a very fair extent of ground for one mine, especially when we come to consider the fact that several of the reefs give a measurement of 20 feet wide, and almost all the reefs that have been exploited give every indication of returning large bodies of rich ore. On November 15 there was a very important reef discovered, the value of which was £14 13s. to the ton. That discovery we considered of sufficient importance to have it made known to the shareholders through the columns of the Press. The telegram from the mine on the 11th of last month states that the outcrops of several large reefs have been exposed for a considerable distance on the surface. These are in addition to those I have mentioned. Good progress is being made in all the underground workings, but more recently two large reefs have been discovered, one named the Lavington reef, in compliment to our worthy secretary, and to the other, which I think is the richer of the two, Captain Argall has given his own baptismal name. Now, I do not think either Mr. Lavington or Captain Argall need be ashamed of the use of his name in connection with these two reefs, inasmuch as from the footwall portion of the Argall's reef the assay value of the ore is £6 5s. 10d. But what seems to me to be better still is that the assay value of the general samples taken from the same reef gives no less than £7 14s. 10d. to the ton. (Applause.) That seems to me to be a very satisfactory indication as regards the value of the reef we are now opening, more especially bearing in mind that the mine is only partially developed. There are several operations yet to be conducted underground, and, as far as one can foresee, they ought to be very valuable, and to return a large output of ore. The manager considers that the present stamping power of 20 stamps judging from the reefs that have already been exposed in the various parts of the mine, will not be sufficient for the output which the mine with further development will give. He has, therefore, taken steps to increase our water-rights, which we considered ample for the purposes of running 20 stamps, but which would have to be increased if that number were to be doubled. Whether it will be exactly 20 stamps that we shall add, I am not in a position to say. I may mention that when last we had the pleasure of meeting you the road from Komata Creek up to the Machine Site had given considerable trouble as regards the transport of machinery. In fact, some of the latter was kept back for a considerable time in order that the state of the weather and the condition of the roads might improve. Captain Argall called the attention of the local authorities to the condition of this road, and I am happy to tell you that he has at last got the local authorities to go into the matter, and they are about to repair the road. Captain Argall's attention is now directed to a matter of very great importance, and that is the question of utilising the water-power. He thinks it will be sufficient, with the erection either of a Turbine or a Pelton wheel, to generate considerable power. He is now of opinion that he will be able to introduce electricity as a motive power. At first the outlay in this direction may probably be considerable, but eventually it will be productive of immense economy, so that with this view he has an electrical engineer on the spot investigating the basis of the operation. He intends also to apply to the School of Mines to obtain another view, if possible, of confirming, or otherwise, the opinions previously given. So that I think you may be perfectly satisfied that the management of your property is in efficient hands. He states in one of his last letters that he now considers the success of this mine perfectly assured. I do not think there are any other points on which I need dwell. I went into matters fully upon a previous occasion, and I merely reiterate some of the points now, in order that you may be in possession of all the information we have up to date. Of course, if anything of a startling nature does occur, we will communicate with the shareholders individually by postcard; otherwise we shall communicate with them through the columns of the Press.

The resolutions were then put and carried unanimously. A vote of thanks to the Chairman and directors terminated the proceedings.

WAIHI SILVERTON EXTENDED GOLD MINING COMPANY, LIMITED.

An extraordinary general meeting of the Waihi Silverton Extended Gold Mining Company (Limited) was held on Tuesday, at the Cannon-street Hotel, E.C., Mr. WILLIAM THOMAS MORRISON in the chair.

The SECRETARY (Mr. C. S. Mats) read the notice convening the meeting.

The CHAIRMAN stated that the object of the meeting was to comply with the New Zealand Act, under which a register of shareholders must be kept in New Zealand, and the company had to comply with that Act on or before March 1. Hence the necessity of holding this meeting. The Chairman, in conclusion, moved the resolution sanctioning the alterations in the Articles of Association, to enable the company to comply with the Act.

Mr. O. H. DAVIS seconded the resolution.

The CHAIRMAN, in reply to a SHAREHOLDER, said that the shares of the company could be transferred without more than the ordinary delay in communicating between England and New Zealand. If shares were sent from New Zealand, with a request to the board to place them on the London register, they would be transferred at once, provided the directors were satisfied of the bona fides of the parties.

The resolution was then put and carried unanimously.

The CHAIRMAN then said: Gentlemen—I have no doubt you would like to hear something about the progress that has been made at the mine during the last few months. The directors are very happy to meet you on this occasion, and will do their best to give you all the information in their power. You are aware that the company was registered about a year ago, and the date of the prospectus was February 5, 1895. Since that time the mine has made very extraordinary development. We held the statutory meeting on May 23 last, and at that meeting I explained the steps we had taken to put the mine into thorough working order, including the purchase of a considerable quantity of machinery, aggregating about 300 tons, and at that time it had arrived at the mine. Since then the local board, in conjunction with our very excellent manager, Mr. Adams, have been engaged in putting up the machinery and simultaneously developing the mine, by increasing the size of the shaft and making a crosscut to cut the lode, which they anticipated they would cut within six weeks from starting. They cut the lode almost to the day they expected they would, and on August 27 we received a cablegram, saying:—"Out Silverton lode in crosscut, 14 feet wide, assay value £6 10s. per ton." Subsequently to that we received a cablegram asking us to increase the number of stamps. Originally we had intended to put up 20 stamps, but we received a cable stating that, in consequence of the development which had taken place, it would be desirable to double the stamping power. We immediately gave instructions to erect 20 more stamps, and that has delayed the crushing, because it was obvious that it was better to work with 40 stamps than with 20 stamps, the cost of working 40 being very little more than that of working 20. Moreover, the putting up of the new stamps would necessarily interfere with the working of the first 20. Had it not been for the extension of the stamping power, we should have been crushing in December; we shall now be crushing, probably, at the end of this month; in fact, we have a cable to that effect. On November 18 we had a cablegram that we had cut a new reef, and on November 27, after they had cut through the reef, they telegraphed:—"The new reef is 15

feet wide, 2 feet footwall, value about £21 per ton, average assay £7." That, including the other reef, makes a total of 29 feet of reef, which, I think, is rather abnormal. As you are aware, the capital of the company is £60,000. We have provided these 40 stamps, we have done all this development work, we have got ample cyanide plant, and I anticipate that by the time we have completed everything—and it is nearly completed now—we shall have an unexpended capital of about £10,000. (Hear, hear.) The consulting engineers, Messrs. Touzeau and Janson, have been kind enough to furnish me with a summary of the work done at the mine in sinking:—"The main shaft, which is 14 feet by 6 feet, has been sunk 88 feet; enlarged and re-timbered 20 feet. Total depth from surface 108 feet, or 88 feet below old drainage level. No. 2 shaft is sunk 60 feet; the crosscut from the main shaft is driven 197 feet from the shaft to cut the Silverton reef, and a further 7 feet to cut New reef. No. 1 level on Silverton reef driven east 147 feet, and west 122 feet; total 269 feet timbered throughout. No. 1 level on New reef driven east 53 feet, and west 66 feet; total 119 feet. No. 1 level on Christmas reef driven north 16 feet; reef 5 feet wide, and worth £6 10s. per ton. Two prospect tunnels are being driven. Distance already extended over 530 feet." That is the other reef, from which as yet we have not discovered much of value, but we hope to by-and-by. Now I will read you some extracts from a letter which I received from the Chairman of the local board by the last mail on January 30. It is dated Auckland, December 27, and he says:—"I think a few lines from me will interest you in regard to our progress in the Silverton. I am somewhat pessimistic by nature, but you have no conception of how rich a mine you have in the Silverton. All my prognostications are put in the shade by the size and richness of the lodes now being developed. I have advised you in our home letter that we have discovered a third rich lode bearing a course due north, and our manager is of opinion, and I fully concur after working out the data, that we have enough quartz from our present level up to the surface to keep our 40 stamps going as hard as they can for over two years. But we are extending our exploitations in each direction, for the quartz we are grasping, though only that won in driving, will far more than recoup the cost of mining, and the more we open up our mine now the more valuable it will become. As you say, our share capital is small, and when our returns are before the public the value of these shares will be considerable. We have been exceedingly fortunate in securing Mr. Adams as manager, and I am aware that, like myself, he anticipates an immense success when we start crushing. I trust you will bear in mind that after we start the battery our first clean up must be relatively small, or longer than a month's crushing must ensue on two grounds—first, it is usual to put the lowest grade and poorest dirt through until the stamps are working regularly and well; and, secondly, that in cleaning up from cyanide a large portion of the gold is locked up in the zinc towers, and left in solution in the slumps which, when they are charged, does not reduce the following periodic returns. When we have fairly started, the expense of mining and crushing will be smaller than with any other cyanide plant here. We anticipate being able to mine and run our quartz into the kilns for 6s. per ton, while £1 should cover cost of mining, crushing, and treating. Enclosed I send you a rough sketch of our ground, and the reefs or lodes in adjoining or outside mines which is as nearly correct, as surveys have been able to prove. It shows a wonderful ramification of lodes, and gives some reason for the two new finds we have been able to advise you of lately. I will now read you the official letter which we received by the same mail, and bearing the same date:—"Mine: When penning our last letter, we felt our good fortune in the discovery of our new and valuable lode was sufficient to ensure success beyond our most sanguine expectations, but now we have not only to advise you of the continued richness of this lode, but also the discovery of yet another large lode running at an acute angle with the Silverton and the new lode last reported. We have so far only driven upon it for 14 feet, but our manager reports it a strong and valuable lode of from 5 to 6 feet in width, and of a value of £6 10s. per ton. A tracing sent herewith will explain the position of this lode, which there can be little doubt is an entirely new one, and may possibly turn out to be the No. 2 lode, on which we are sinking a shaft in our No. 1 Special, the shaft being 1600 feet distant from the point of intersection with this new lode and the Silverton lode. Our manager proposes, after continuing the drive upon it and ensuring its being distinct from the new lode last reported, to name it the 'Christmas Box.' Therefore, should we refer by cablegram to Christmas you will understand that we refer to this last discovery. The new lode, our No. 3, has been driven upon 119 feet, and it bids fair to rival, if not surpass, our old Silverton lode. The amount of ore now in sight and ready for stopping is very large, and we shall be exceedingly pleased when we can commence reducing it, and repaying the outlay incurred in plant and development.—Progress: The works are now gradually nearing completion. The dam is finished, and is an excellent piece of work, and thoroughly successful. The tramway is well forward, and the locomotive running with ballast trucks, so there will be no waiting for the means of communication between mine and battery. The iron pipes are laid (instead of wood fluming) in bringing the Mangakiri water race to our high level supply, and this work will be completed in time for crushing, and will be of very great value. The assay plant, roasting and smelting house is completed, and every effort is now being made to push on with the battery. As we have advised you, progress was delayed by the steel shanks, cams, &c., not arriving from England as early as expected. These are now to hand, and every effort is being made by our contractors to push the work on. Unfortunately, we have the intervention of the Christmas holidays, but notwithstanding this, parties of the contractors' men are at work on the battery and on the tanks. So far as the mine is concerned, we have stopped work here for a fortnight, as we have the mine well opened up, and it is hopeless to keep the men on shift with the surrounding miners away. The pump is being kept going, but this is practically all the work done in the mine. It is true that with the lodes at present opened the keeping of 40 heads continually at work is mere child's play. At any moment we may have to advise you of our striking some good ore in our No. 2 shaft." That is all that is interesting in this last communication. We wired to New Zealand to get the latest information from the mine, and we received a cablegram yesterday. We asked when they would begin crushing, because we expected it would have been about now, and the answer we have received is:—"Unavoidably delayed by contract for machinery; expect to commence about February 28. The junctioning lode has a lode of 30 feet; the ore now coming to hand is all good crushing dirt; average assays being value £8 per ton; the development of the mine fully justifies the expectations which have been formed." We received this cablegram this morning. I do not know that I have anything more to say, but if any gentleman has any questions to ask I will endeavour to answer them to the best of my ability.

Mr. CUTLIFFE said there was one point on which he would like to make a few observations. He was one of those who fixed the capital at the present amount of £60,000, and he was quite convinced that the proper mode of procedure was to fix the capital at a small sum when a company had something to prove, however good the property might be thought to be. When, however, the mine was more or less proved, and when, as in this case, they had added very considerably to the area of their property, and discovered so many reefs, it became a question whether it was not advisable, for many reasons, that the capital should more nearly correspond to the value of the property. He was aware that that would not alter the intrinsic value of the property, but his reasons for suggesting that there should be an alteration in the capital were these:—"The shares were extremely firmly held, and this made them most difficult to deal in on the market, there being only 60,000 of them. Now they were going to open—and quite rightly too—a New Zealand register, and the passing of the shares backwards and forwards would mean a certain look up of those shares, and this meant a restricted market. He, therefore, suggested that the board should take into consideration the increasing of the capital by allotting further shares. There

was one other point he would ask the board to consider at the same time, and that was, with such enormous reefs as 30 feet, and so many reefs, whether 40 stamps would be anything like sufficient for the work. Might they not be able to do a great deal better by putting up a larger number of stamps later on; and if so, would it not be advisable to have a certain sum in reserve to apply to that purpose?

A SHAREHOLDER enquired what was the acreage of the property belonging to the company.

Mr. CARTER said, as was well known, the appointment of a mine manager was a very important step, and he felt quite sure, from what the Chairman had said, that the board had done their best to appoint a proper man. This, however, was not always done, and in one case that had come under his notice, a solicitor from a country town had been appointed manager. (Laughter.) What that gentleman could know about mining he could not understand.

The CHAIRMAN, in reply, said: With regard to the observations of Mr. Cutcliffe, there is no doubt a great deal in them. A great many of these shares are held in New Zealand, and it is very natural that people in New Zealand will be very glad to have this colonial register, because it will enable them to transfer their shares pretty quickly, and I have no doubt that they will concur in the views expressed by Mr. Cutcliffe that it will be desirable to have our capital more nearly representing the value of the property than it now does, and the directors will take the recommendation into serious consideration. With regard to the increase crushing plant, that matter has already been hinted to us by the Chairman on the other side. He has written me that before their winter was over he expected to have to ask us to increase the stamping plant. We have £10,000 expended, and that will enable us to put up increased crushing plant if it is needed. (Hear, hear.) The present acreage of the property is about 174 acres. The original ground which this company took over when it started was 83 acres, but we have since acquired 91 acres. We have not done much on the 91 acres, but we have surface indications in one part of the property, and we are led to suppose that the reef of the neighbouring Gladstone Mine runs through that property. We have not yet proved that. With reference to Mr. Carter's remarks, I do not think our manager ever was a solicitor. I believe he is a man who has had very great experience of mining in the colony, and he was selected by the local board. We are represented in Auckland by three gentlemen. The Chairman, Mr. Pond, is a gentleman of considerable scientific attainments, and is the Government Analyst of the Colony, which is a very important position, and we left the question of the appointment of manager subject to our approval in their hands. The local board advertised for a manager, and received a great many applications, but Mr. Adams, having the best record, was selected. We have every reason to be satisfied with Mr. Adams. When we first appointed him we thought it desirable to have a consulting engineer upon the spot, who had experience of the locality, and who would look into the recommendations made by Mr. Adams to the board. We selected Mr. Richard Spratt, who was consulting engineer to the Waihi Company. Unfortunately, Mr. Spratt had recently died, but up to the day of his death he took a great interest in the Waihi Silverton Extended Company, and almost the last official act of his life was to advocate very strongly the erection of an additional 20 stamps, on the ground that our reefs had every indication of being permanent. There is one peculiarity of these New Zealand reefs. They are not like reefs in other places, which run at an angle; they are almost vertical, so there is every probability that they will go down 2000 feet, and we are now only down 100 feet, so you may imagine what the possibilities of the future are in connection with the company.

On the motion of Mr. CARTER, a vote of thanks was passed to the Chairman, and the proceedings terminated.

SUCCESS GOLD MINES, LIMITED.

Mr. H. WILSON, Chairman, presided over the first ordinary general (statutory) meeting of this company, at the offices of the company, Dashwood House, E.C., on Tuesday.

The SECRETARY (Mr. W. J. Lavington) having read the notice convening the meeting,

The CHAIRMAN said: Gentlemen—You will have understood from the notice that has been read by the secretary that this is the first ordinary general (or statutory) meeting, held in compliance with the law. At such a meeting no accounts are presented and no resolution can be moved; but that does not prevent us giving you all the information in our possession regarding the progress—the very satisfactory progress—that has been made in the development of our property. We have had from our manager in New Zealand (Captain Hodge) a most interesting report, which has been sent especially for your information at this meeting, and which goes thoroughly into every detail of the mining operations. He gives us facts from which we can draw our own deductions as to the value of the property, and it shows that an enormous amount of progress has been made since he took charge of the development of the mine, though, of course, in taking up a new mine not very much can be expected as the result of four months' work. I think, however, when you consider the short time he has been at work, Captain Hodge has established a record in connection with mining development which it would be hard to beat. His report, which I will ask the secretary to read, is dated December 19, but since then we have had a communication from him by wire, and he is also able to tell us that on January 11 the property was legally and properly transferred to the company; so that there is no hitch whatever as to the title or as to the completion of all the forms necessary before we get possession of the property. He also tells us on the same date that the engine, boiler, 10 stamps, wire tramway, hoppers, buildings, and all appliances for carrying on the work had been provided for at a cost of £2400, and he expects that he will be ready to begin work within a period of six months from the date of his letter. I think that if that is satisfactory to you as it is to the directors, who are responsible for the administration of your affairs, you have reason to be well pleased with the position of the property. I may also tell you that the whole of the capital has been subscribed—which is very satisfactory, too. The report from Captain Hodge is, of itself, so interesting that were I to comment upon it I should be guilty of mutilation, as any concise description would interfere with the integrity of the report. I will, therefore, call upon the secretary to read the whole of it.

Mr. LAVINGTON then read the following:—

December 19, 1895.—I beg to hand you the following report for the statutory meeting of the above company, and with this I forward a section on the line of reef being developed, known as James's east and west reef; also a section of the large reef No. 1, and the crosscut approaching from the deep level in the New Hauraki.—Area. The area of the property contains about 15½ acres, in three sections, known as Try Again, 5 acres 3 rods 30 poles; James's Registered Claim, 1 acre 0 rods 31 poles; and West Try Again, 5 acres 1 rod 25 poles. We propose surrendering these, and applying for one holding, as one claim, for 21 years from the first day of January 1896, renewable in perpetuity.—Situation. The property is situated in a line south-easterly from the Tokatea group about 180 chains, which is a continuation of the same high main auriferous belt, and promises to be the best place of mining property yet developed south of the said group. The favourable steep grade of the hills, and the position of the reef traversing the same, make the mine very extensive from the bank of our deep level crosscut alone.—Progress of development. The following work has been done for the first month of four weeks ended December 14.—Big reef crosscut. This crosscut has been extended towards wine sinking on large reef No. 1 43 feet 6 inches; the total drive here is now south-east 113 feet 6 inches from the New Hauraki deep level. This crosscut is being pushed for communication to wine, not only for ventilation (to drive (say) 236 feet north to some under James's level about midway between Nos. 3 and 2 rises), but to take away our reserves above James's level, while we develop James's reef from this level. This said crosscut will intercept James's reef south-east (see section) about 90 feet perpendicular under our present developments on that reef, and I look upon this point as one of the most valuable developments for the

present in connection with our operations. The rock being passed through in crosscut is very hard, rendering progress slow. I anticipate more moderate ground after passing the wine. We have to-day about 77 feet to reach that point. The lode in the wine has taken a rapid dip, and is much disordered, and only carrying a small vein of quartz on the hanging wall. This is only characteristic to the reef in this locality, and in being developed I trust will give good results. The wine on large reef No. 1 was sunk for the month 18 feet 3 inches, and is now down 55 feet. The reef is 5 feet wide, and disordered as mentioned above. James's level has been extended 8 feet for a part of the month only (the men being engaged in completing No. 3 rise to intermediate); the reef here is unusually large, being 9 feet wide, but, taking the whole width, will produce good payable ore for the stamps; on the foot and hanging walls we meet occasional colours of gold. The whole of the reef formation is much charged in iron oxides, and more characteristic to the general shallow outcrops of reefs than at this depth. All along the bottom of the level of this drive, however, a good payable reef is gone down of the same character, varying in size from 6 inches to 2 feet. Reviewing this, it speaks well for our next level (39 feet deeper), and inasmuch as small pockets of gold occur in the oxides, samples of which I have sent you, I fully believe we are going over a rich mine below. At the same time all the reserves above James's reef level I estimate will pay well. No. 3 rise has been communicated and timbered through to the intermediate, and rising commenced above that level. We had good prospects of gold in rising all throughout.—James's reef, intermediate end. This end was extended 18 feet 3 inches, making a total of 115 feet from No. 2 rise. We obtained some few picked stones of gold at the commencement of the month, and good crushing ore. The reef in the forebore is now, however, the part carried, pinched up, small, and disordered. We have, however, 400 feet more to extend in this direction, in which drive I anticipate opening up large reserves for the stamps.—James's reef west. The end west is now under shallow ground and nearing the surface, consequently the reef is disordered. We shall communicate here for ventilation.—Bennett's level. Eastward this has been extended 39 feet 10 inches for the month. The reef has become very irregular and disordered; in consequence we are crosscutting north and south to prove if any part of reef has escaped in that direction. We have employed 30 men. We have quartz stocked in the mine—about 200 tons—which cannot be dealt with until our battery is erected and wire tramways, &c., laid thereto. I estimate the value of this quartz and 40 lbs. of picked stone that we have on hand to be worth together, approximately, £500. The 10 head stamp battery, Pelton wheel, aerial tramway, 25 horse-power boiler, Tangye horizontal steam engine (4½ diameter and 25 inch stroke), buildings (52 feet by 26 feet and 44 feet by 28 feet foundations), road making, erections, and all complete have been ordered for the sum of £4150, and will be set to work in six months from date. In conclusion, we shall continue our development and opening up reserves above James's level available for regular returns, and from all appearances we have every reason to suppose that the deep level under James's will develop a more valuable reef. I do not care to be too sanguine, but the character reef at that depth, by being developed through and through is qualified to give fabulous returns characteristic to specimen reef in this locality. We shall hurry on the erection of plant now during the summer months, and keep the opening up of the different sections well forward in the meantime, after which, when we get to work, I hope to be able by results to satisfy all concerned.

Mr. LANE, who spoke at the request of the CHAIRMAN, said that the report seemed to him a very exhaustive one, but, perhaps, the shareholders would like some explanation of it on the maps which had been prepared. The chief operations at present were the driving of the deep level of the New Hauraki. That deep level—when it arrived at a certain point—would crosscut and come under the works of the Success, 160 feet below the deepest work they had as yet reached. The chief work was the driving of the east and west lode, known as the James's. The report told them that that level had been driven a considerable distance—he thought some 200 feet or 300 feet. The whole of that distance produced gold. Very little gold had been taken out previously. Extensive operations had also been proceeded with by the present company in making an intermediate level and an upper level, all of which showed gold. The whole of this ground was untouched; no ore had been taken out nor any gold taken out in any shape or form. They had a large quantity of ground now blocked out and made available for the stamps. It was no use, however, working the ground further until the stamps were ready to begin work, but they might easily calculate that the first return would be a very good one. It was not for him to say what quantity was ready, but on November 18 it was estimated that the quantity was very considerable. It all depended, however, on the picked stone; some of it was very rich, one lot of 40 lbs. being of the value of £100. In both the rises this stone was met with, and they might calculate, as the bottom of the level was passed—and there was a rich course of ore the whole way—what the level of 99 feet and the level of 160 feet would produce for the company. He could not say more; but, to show the opinion held by the Government as to the character of the property, he might tell them that Captain Hodge, having applied to the Government to make a special road to the property, got a reply in these terms:—"The council ask the company to contribute one-fourth of £600, the cost of the road from Coromandel to the mine. This I have objected to, and I believe I shall get it started in a few days without it; if not, I will do the best I can for the company." If the authorities did not look upon this mine as something of a permanent character, would they go to the expense of making a special road from the town to the mine? Of course, all mining was speculative; but he looked on this as almost a certainty. Every point that they had opened up had proved good. They had a large working capital—something like £20,000—and a mine that could be worked cheaply. Altogether they had a property second to none in the district.

An extraordinary general meeting was afterwards held for the purpose of considering resolutions altering the Articles of Association, in order to comply with the provisions of the New Zealand Mining Law Amendment Act of 1895.

The CHAIRMAN moved, and Mr. LANE seconded, the resolutions, which were carried unanimously.

A vote of thanks to the Chairman closed the meeting.

DE BEERS CONSOLIDATED MINES, LIMITED.

The adjourned seventh ordinary general meeting of the De Beers Consolidated Mines (Limited) was held in Kimberley, South Africa, on January 10, under the presidency of Colonel HARRIS.

The proceedings were reported as follows in the *Cape Times* to hand by Tuesday's mail:—

The report of the directors for the year ending June 30 last stated that the balance carried forward on that date, after providing for payment of two dividends of 12½ per cent. each, was £116,001. During the 12 months the diamonds produced realised £3,105,953. The total expenditure amounted to £1,704,813, including the sum written off for machinery, and plant account, &c., £148,841, and payment of interest on company's debentures and obligations £226,183, leaving a profit of £1,401,145. The profit and loss account stood as follows:—Balance as above, £1,401,145; dividends on investments and rents, £86,237; profit on investments realised, £23,070; revenue from various sources, £11,449; balance from previous year, £726,667; total, £2,248,568. Dividends paid and provided for, £987,239; redemption fund (De Beers-Bultfontein obligations), £28,100; reserve in Consols, £923,784; debenture conversion expenses, £193,444; balance carried forward, £116,001; total, £2,248,568. The average yield per load for De Beers and Kimberley was '85 carats; the average value per carat was 25s. 6d.; the average value per load was 21s. 8d. The reserve fund, invested in English Consols, which on June 30, 1894, stood at £894,872, had been increased by the addition of the accrued interest, and by the realisation of a portion of the British South Africa Company debentures, received in settlement of advances made to that company, and now amounted to £997,727; nominal value, £1,013,000. The crushing and concentration plant had been completed at considerable cost, and was working very satisfactorily. The company's contribution

of £75,000 to the capital of the Indwe Railway, Collieries and Land Company (Limited) has been paid, and it was satisfactory to be able to report that the railway was almost completed. The quantity of blue ground and lumps for the floors on June 30 was 3,360,256 loads, and the directors, being desirous of reducing this item as far as possible, had taken the stock into their account at 1s. 6d. per load, against 2s. 6d. in 1894, which was considerably less than the cost of placing it on the floors. During the year an increased price was obtained for the diamonds produced, and the directors anticipated that present rates would be fully maintained by carefully regulating the output.

The CHAIRMAN, in moving the adoption of the report, said: Gentlemen—I think I can safely say that the satisfactory and very strong financial position of the company must be plain to all shareholders on perusing the balance-sheet and profit and loss account; our total income for the year from all sources amounted to £3,226,714; and the total expenditure, including interest on debentures, payment of interest, bonuses, and writing off £148,842 for depreciation came to £1,704,813, leaving an available balance of £1,521,901 to be dealt with by the directors. You will naturally ask what has been done with the money. We paid two dividends of 12½ per cent., which amounted in the aggregate to (say) £917,239; the cost of covering our 5½ per cent. debentures, including the premium on the total of the debentures redeemed, commission, and stamps, was £193,444. We also paid our contribution to the share capital of the Indwe Collieries, Railway, and Land Company. The crushing plant, which has cost about £125,000, was almost paid for during the period under review. In addition we redeemed £28,100 worth of De Beers-Bultfontein obligations. These items, together with £116,000 unappropriated balance carried forward, fully account for that £1,521,901. We sold £3,105,957 worth of diamonds as compared with £2,820,172 for the preceding year, an actual increase of £285,785. I may tell you that we have practically disposed of the total output until the end of 1896. A diamond syndicate are purchasing from the company £5,400,000 worth of diamonds from July 1 last to the end of the year. This is equal to an average annual sale of £3,600,000, or an increase of £600,000 per annum as compared with last year's sales. I will not further deal with the diamond question as being personally interested in the syndicate. I think it is just as well that I should simply lay before you the bare statement of facts. You will observe by looking at the figures contained in the balance-sheet that we have written down the blue on the floors from 2s. 6d. to 1s. 6d. per load, thus absorbing £172,000 of the profits. We do not intend writing this item down at any future period. I daresay some of you would like to know how that reserve stands at the present time. On December 31 last we had actually invested in Consols £1,025,000, a total increase of about £330,000 during the last 18 months. Well, I suppose you would like to know whence we have obtained this large amount. I think you are aware that we have always invested that interest from Consols in Consols, thus duplicating our reserve. The interest during the 18 months amounted, roughly, to about £300,000, and the remaining £300,000 was realised by the sale of British South Africa Company's debentures, which we took in payment of our advance. Those of you who were present at our last annual meeting will remember that our Chairman referred to this matter, and actually anticipated what has subsequently occurred. I will just read you what he said:—"Then, if you take the next paragraph in the report, you will see that we have the sum of no less than £300,000 advanced to the British South Africa Company on 6 per cent. debentures, and when these debentures become marketable, as I think will shortly be the case, it will be a question whether we should not also put it to the reserve fund, thus making the fund stronger." Now, gentlemen, the advances we have made to the Chartered Company have been highly profitable to the De Beers Consolidated. We have netted in 6 per cent. interest a profit on sale of debentures and in bonuses of something like £58,000, besides which we possess other valuable considerations, including the pre-emption of all diamond mines that may be discovered in the British South Africa Company's territory; 100,000 morgen of land in Mafeking, surveyed by Mr. Orpen, and favourably reported upon by him, and we have also a third share of 80,000 square miles of land in British Bechuanaland. I think you will all agree with me that this is a very valuable asset indeed. From this summary of the De Beers Company's dealings with the British South Africa, I am sure you will agree with me that it is very satisfactory in every sense of the word. While on the subject of finance, I may inform you that we have given notice to the holders of Griqualand West 6 per cent. debentures that we intend paying off the whole of the £153,000 within a few weeks. We also give notice to the holders of De Beers 5½ Bultfontein obligations that we shall redeem their scrip on April 1. It will be observed on looking at the balance-sheet that the sum owing on this account on June 30 amounted to £693,400, since when we have paid off £281,000; leaving to be extinguished £695,500. We have given the owners the opportunity of exchanging them for 4½ per cent. obligations if they give the company notice of their willingness to do so on or before April 18. The holders of £300,000 of this stock have already agreed to accept the lower rate of interest. You will observe, gentlemen, that the drift of this company's financial policy is in the direction of decreasing the fixed charges of the company and increasing the reserve in British Consols. With regard to the output, I think it will be admitted that the company's policy of regulating the output of diamonds is a wise one, and that by gauging the world's requirements and carefully feeding the markets we have succeeded in maintaining the prices since the consolidation in 1888. Other diamonds, amounting to a million annually, are produced by companies and individuals who are reaping the benefit of our policy. I do not think that we have anything to fear from outside production, which has actually decreased since 1893, nor from any newly-discovered mines. Even the wealthiest of men do not derive very much amusement by producing diamonds at a very big loss. Now, you are all aware that this company has some interest in the supposed Griqualand West gold fields. You will all remember that in August last there was intense excitement over the alleged discovery of payable gold reefs in the districts of Herbert and Hay. It is well known that this company secured options over a very large area. If we had discovered payable reefs we intended developing and working them for all they were worth, but I regret to say that the result has been most disappointing. We had a large working party in the Herbert district, but after working for three months without finding any reef, or the slightest trace of gold, we decided to stop. We have still a large working party in the Hay district, but reports are most discouraging. We have found reefs, but they contain no gold; we have, therefore, given instructions to cease work in a few weeks, unless we get better news. I must admit that I have no confidence in these reported gold fields, but I consider that the company was perfectly justified in obtaining the option. If payable gold had been discovered in Griqualand West, and De Beers Company had not secured interests, I think the share

holders would have had good ground for complaint, and I feel sure that they will not grumble at the loss sustained in this speculation which will not amount to £20,000, so far as the company is concerned, as we allowed others to share in the venture. I should like shortly to refer to the Premier Mine. Mr. Ward has all but finished the 5,000,000 loads he was entitled to mine and wash according to the terms of agreement entered into between him and the company some four years ago. The property will immediately revert to this company, and we intend producing about the same quantity of diamonds per month as Mr. Ward was allowed to sell—that is 16,000 carats per month. This we calculate will result in a further, or, rather, an additional profit to the company of £100,000 per annum. If we carried on the affairs of this company on strictly business lines we should not work the Premier Mine at all, because we could produce the same quantity of diamonds from the mines of Kimberley and De Beers at about half the cost, which would, I calculate, result in a profit of £170,000 per annum, instead of the £100,000 before mentioned. But the shutting down of the Premier Mine would throw a lot of people out of employment, and to prevent the consequent distress we have decided to continue working. With regard to No. 3 area, you will remember that this company granted a concession to the Borough Council regarding the washing of the debris for three years. In No. 3 area this expired during last year. It was pointed out to us that if we refused an extension of time many families would be deprived of the means of making a livelihood. We agree to extend the period until the end of 1896. I may tell you that the average annual production from No. 3 area is about £50,000, and out of this the Borough Council get £2500 annually by levying a 5 per cent. commission on all diamonds found. If we had refused to extend this privilege the company could have still further increased its profits by a further £35,000 per annum, because we could produce diamonds of the value of £50,000 at a cost of £15,000 to the company. You will, therefore, see that by working the Premier Mine, and extending the period for washing debris in No. 3 area, we have, purely in the interests of people and the commercial community of Kimberley, relinquished over £100,000 of profit we could have made during 1895. Gentlemen, I trust those who may be conducting the affairs of this company in future will always be actuated by a liberal spirit, and that in shaping the policy of this great concern every consideration will be shown to the community, with due regard to the interests of shareholders, and that no directly hostile legislation will compel this company to adopt purely commercial principles in the management of its affairs. Now, gentlemen, I propose carrying you in the company's finance to the end of 1895. We declared an 18s. dividend at the end of December, and I think it is the proper time to let the shareholders know how far we were justified in increasing the dividend from 12s. 6d.—or, rather, from 12½ per cent. to 18 per cent. for the half-year. On December 31 we had in cash and bills the sum of £1,051,500, and diamonds amounting to £438,500, making a total amount at our disposal upon the first year of £1,490,000. Now, if we deduct from this large amount the debenture interest due on January 1, the redemption and bonuses, and some smaller items due on the same date, we get £280,000, leaving a balance to be dealt with of £1,210,000; and if we set aside the 18s. dividend, which amounts to £711,000, we had actually at our disposal on January 1 £499,000—practically half-a-million. Now, just think of the position. After paying our redemption on debentures, interest on debentures, bonuses on debentures, and setting aside the £711,000 of the dividend that was declared on December 31, we still have £500,000 to help us on our way from January 1. I think you will admit that this is a very comfortable position to be in, strong on all points. On January 1 the financial position of the company was far stronger than it has ever been on any previous occasion. Let us consider for a moment the position of the company other than financial. Our mines are in good order, the shafts in perfect condition, the quantity of blue on the floor greater than ever it has been since the consolidation. You will remember that the highest point previously attained in this respect was reached on June 30, 1894, when we had reached 3,532,137 loads of blue on the floors. On December 31 last we had actually exceeded this quantity by 2800 loads, the total being 3,534,917 loads of 16 cubic feet. I know we can safely say, gentlemen, that there is not a weak spot in the company's concerns, financial or otherwise, and I trust I have proved to the satisfaction of the general body of shareholders that we were perfectly justified in declaring an increased dividend in December. You know it has never been our policy to pay dividends up to the hilt. We have always avoided paying spasmodic dividends. Before declaring an increased dividend we studied whether it could be maintained in ordinary times. If you refer to the dividend statistics, it will be very gratifying for you to know that the improved condition of the company's finances and our ability to give a bigger return for your investment has not been effected at the expense of our managers, staff, or workmen. We have saved nothing in labour. On the contrary, we have in many instances increased the pay of our staff. The economy has been effected in material. A large amount has been saved annually in fuel, water, and dynamite, and I believe it will be found possible to still further reduce the cost of these articles. Gentlemen, I have endeavoured to place before you as shortly and as clearly as I could a plain statement of the affairs of the company, and I have now to formally move the adoption of the report.

Mr. HAARHOFF seconded the motion, and it was unanimously carried, the proceedings then terminating.

THE GLEN ELGIN GOLD MINES, LIMITED.

The ordinary general meeting of the shareholders was held on Tuesday, at the offices of the company, Dashwood House, E.C.—Mr. T. H. WILSON presided.

The SECRETARY of the company (Mr. A. Corder) read the notice convening the meeting, and the report and accounts were taken as read.

The CHAIRMAN said: Gentlemen—Although, since our last annual meeting, progress has not been so satisfactory as we then anticipated, still there are several satisfactory features to note, which I will endeavour presently to explain. I will, however, first briefly refer to a few of the causes which have retarded progress. For one thing, owing to our not having been in a position to incur any heavy expenditure to push on developments as we should have done, we have been compelled to make the mine pay its own way as far as possible. The slide or fault referred to in the report has also altered the position, in the lower ground, of the shoots of stone driven through in No. 3 tunnel, carrying them further away from the lower tunnels, thus making it necessary to extend the latter much further than we expected to reach those shoots. Then, again, we have had an exceptionally hard piece of ground to drive through in No. 1 tunnel, but I am glad to say that, though the ground is still hard, we appear now to have got through the worst of it. What stone we have raised and crushed during the year under review has given a satisfactory return (about 17 dwts. per ton) of the pyrites, which is rather above the average yield of the total crushed to date, that is a little over 15 dwts. Concentrators and a calcining furnace have been erected, and an amalgamator has been procured, which was expected to arrive at the mine the beginning of last month, and we have every reason to expect that

by means of these appliances we shall be able to extract in the future a considerably larger percentage of gold from the ore than we have hitherto been able to obtain. We have, too, a quantity of concentrates on hand ready for treatment as soon as the amalgamator can be started. Up to the present, as you are aware, we have only saved the free gold, or what we have been able to save by the battery alone. A very satisfactory feature, I may mention, has been that, so far, whenever a shoot of stone, which had been worked near the surface, has been met with lower down, it has been found to have increased in length and width, and also in richness. This refers chiefly to the shoots driven through in No. 3 tunnel, which we previously worked near the surface. This gives us some reason to expect that our reefs may improve in depth as many of the reefs have done in the rich gold field of Charters Towers, in Queensland, where both the reefs and geological features are very similar to those at Glen Elgin. In fact, many experts are of opinion that the same belt of country continues from Charters Towers through the Glen Elgin district. I don't mean to infer from this that we must expect this to be the case throughout, especially with regard to the width of the reefs, for in granite country, such as we have at Glen Elgin, we must expect them to vary in width both in their horizontal and downward course, i.e., they thin out and widen or "make" again as they are driven or sunk upon. Our great object now is to get No. 1 tunnel extended until it is under No. 3 tunnel, for it is in this tunnel and east of it where the best shoots of stone have, so far, been met with. With this end in view, No. 1 tunnel, about the beginning of November last, was let to be driven by contract at 28s. per foot, and up to the Christmas holidays about 100 feet had been driven. For the present, operations have been suspended in No. 2 and 3 tunnels, but previous to stopping work, as stated in the report, we had in No. 2 a good shoot of stone, which had been driven on for over 50 feet, and No. 3 was also in good stone, and we have written Captain Cook, urging him, if possible, to put some of the stone from these tunnels through the battery, so that we may have some returns while No. 1 tunnel is being extended by contract. Both Captain Cook and the mine manager continue to express the greatest confidence in the future of the mine, and unless they really felt that confidence we can hardly think that they would have stuck to it as they have, the former receiving no remuneration whatever, and the latter little more than an ordinary working miner's wages. I tell you this, gentlemen, because, of course, our opinion here must be chiefly based upon theirs, but I may mention that we have recently had an opportunity of hearing some independent outside opinions upon our property which I am glad to say are of a very favourable character. Perhaps it may interest you to hear what the New South Wales Blue Book, "The Annual Report of the Department of Mines," says, and I will read you a short extract from the last report issued. On page 29 it states, under the heading of Glen Innes Division:—"Although the returns from the Glen Elgin mines did not come up to expectations based on the various assays, still there is no doubt as to the richness of the lodes, and the certainty of a profitable return on the outlay when more experience has been acquired in the economical treatment of the pyrites stone now being sent to the batteries." I think, gentlemen, you will agree with me that these few lines offer us every encouragement for the future, and afford substantial confirmation of Captain Cook's views. With regard to the "Waratah" property, I don't think that I have anything much to add to what has been stated in the report. There appears to be every prospect of the property proving a very valuable one, and I may mention that there is a small portable battery on the mine now, and we expect shortly to hear the result of some test crushings from these.

The resolution was then put and carried unanimously.

Mr. Tom Brown, as a director, and the auditors, Messrs. Hart Brothers, Tibbatts, and Co., were re-elected unanimously.

A vote of thanks to the Chairman terminated the proceedings.

WHEEL BASSET AND SOUTH FRANCES.

An extraordinary general meeting of the shareholders in the Wheel Basset was held on the mine, on Tuesday, when Mr. F. OATS (Chairman of the Committee) presided, for the purpose of confirming the resolutions passed at the extraordinary general meeting in reference to amalgamating with South Frances.

It was stated at the outset that proxies had been received for 3016 shares in favour of the confirmation of the resolutions.

Mr. H. PAIGE, solicitor to the company, stated that the resolutions simply required a bare majority of the entire shares.

Mr. G. CARTER moved the first resolution—"That the mine be wound up voluntarily, and that Mr. E. Readle be appointed liquidator."

Mr. J. MAYNE seconded the resolution, and it was carried unanimously.

The CHAIRMAN proposed the second resolution, approving the draft agreement between Wheel Basset and the Basset Mines, and authorising the liquidator to enter into an agreement with the Basset Mines (Limited) on the terms of the draft. Although this was called an amalgamation between Wheel Basset and South Frances, really it did not take the form of amalgamation at once; that was to say, they both of them, Wheel Basset and the neighbouring mine, agreed to go into liquidation and to accept each of them from the new company to be formed a certain number of shares in that new company. They had first of all to get the consent of the lords of the various concerns, and he might tell them, although they were fairly satisfied they would have everything to protect the new company, they were in some degree even rushing the situation now, because they had not got the full and final consent of every lord in the concern as they would like to have had. They could not come to a decision to liquidate the concern until they had some knowledge that the lease would be renewed in some form to the Limited company. They had made preliminary arrangements for the directors of the company to-morrow, or the next day, to take the concern over on behalf of the new company. The new company had been ready for some time past, and as soon as these resolutions were confirmed, would begin to work and would at once take the two concerns over.

Mr. H. TREMBATH seconded the resolution, and it was carried unanimously.

The CHAIRMAN remarked that they expected in the course of a few days the directors of the new company would decide, on the advice of the manager, what course they would take with regard to working the whole of the property. Owing to the burning down of Marriott's engine the water was accumulating, and there, for the moment, they were in difficulties. But he did not despair that in the course of time they would be able to get the mine in work again, and perhaps by then the price of tin would be better than it was to-day. At South Frances the water had interfered with the working of the best ground, and it was still rising. Steps would have to be taken so as to endeavour to get the mine in work again, and to work it upon lines which should be less disastrous to the concern than had been the result during recent years. The aim of the directors of the new company would be to try and put South Frances into such a condition of working so that it could raise tin without a loss. Exploratory and new work, which they might be inclined to do, would come out of the money they had raised, but the ordinary work of raising tin and selling it must be carried on in such a way as to leave no monetary loss, otherwise they would soon find themselves in queer street again.

The PURSER mentioned that 3016 shares were represented by proxies, and the adventurers present represented 2403 shares, making 5419 shares out of a total of 6039 shares.

The meeting then concluded.

In connection with South Frances, a similar meeting was held, Mr. A. LAYTON, J.P., C.C., presiding.

Resolutions similar to those at Wheel Basset were passed.

In responding to a vote of thanks, the CHAIRMAN said in this amalgamation they were going to try an experiment which, if

successful, would prove whether or not they in Cornwall could compete with those who were producing tin to so large an extent, and at such a price as to be able to exist on. He felt very strongly that they were indebted to one man almost for this amalgamation, and that was to Mr. Oats, who had come at a very opportune time to the rescue of Cornish mining. He had every faith that with a moderate price for tin, with modern appliances, economy, and concentration of effort, that Basset Mines (Limited) would produce tin and leave a profit to the adventurers, and that other mines in the neighbourhood would adopt similar steps. Dark as the cloud was to-day in Cornwall, he was very hopeful that as the result of the pioneer movement in Basset (Limited) other mines would follow its lead, and that mines would work and be remunerative even at a moderate price for tin.

The meeting then terminated.

WHEEL GRENVILLE MINING COMPANY.

A general meeting of the shareholders of Wheel Grenville Mining Company was held on Thursday last, at the company's offices, 7, Union-court, E.C., the chair being occupied by Mr. R. W. GOOLD.

The SECRETARY (Mr. W. Stirling) read the notice convening the meeting.

The statement of accounts contained the following items:—Debtor: October 17, to balance as per last account £1585 15s. 10d.; less dividend of 3s. per share paid on date £900, £685 15s. 10d.; cash received for tin sold from October 23 to January 1 (213 tons 16 cwt. 2 qrs. 23 lbs.), £8363 6s. 7d.; carriage allowed on same, £38 11s. 6d.; total, £9087 13s. 11d. Creditor: November 14, 1895, by labour cost (four weeks to October 26), £1762 12s. 6d.; merchants' bills (less discount), £966 9s. 1d.; December 12, labour cost (four weeks to November 23), £1656 19s. 9d.; merchants' bills (less discount), £1120 17s.; January 9, 1896, labour cost (four weeks to December 27), £1632 18s. 7d.; merchants' bills (less discount), £973 5s. 2d.; lord's dues on tin sold to January 1 (less income-tax), £336 17s. 1d.; bank charges (six months), £69 1s. 10d.; London office rent, secretary's salary, printing, stationery, and sundries, £45 10s. 10d.; law charges, "Lane v. Rich," defendant's taxed costs, £70 12s. 1d.; committee's fees (three months), £32 16s.; total, £8657 19s. 11d.; January 9, balance in favour of the mine, £429 14s. Grand total, £9087 13s. 11d.

The company's agents reported as follows:—

To the Committee and Shareholders.—Goold's engine shaft is sunk 4 fathoms below the 246 fathom level. We are cutting the bottom pit which we should have completed before this had it not been for the great increase of water, which prevented us from working in the bottom of the mine.—The 246 fathom level east of Goold's, the lode is large and producing low quality tin stuff. The 232 fathom level east of Goold's is worth £15 per fathom. The 220 fathom level east of Goold's is worth £13 per fathom. Fortescue's engine shaft is sunk 13 fathoms below the 246 fathom level. The lode is getting larger in the shaft and showing signs of an early improvement; it is now worth for the length of the shaft £30 per fathom. The 246 fathom level east of Fortescue's is worth £17 per fathom. The 246 fathom level west of Fortescue's is worth £16 per fathom. We are now putting up a rise in this level which is up 6 fathoms and worth £17 per fathom. The 225 fathom level east of Fortescue's is worth £8 per fathom. The 225 fathom level west of Fortescue's is worth £8 per fathom. The 206 fathom level east of Fortescue's is worth £12 per fathom. The 178 fathom level east of Fortescue's is worth £11 per fathom. The 165 fathom level east of Fortescue's is worth £7 per fathom. There is one at the 246 fathom level worth £17 per fathom. There are two at the 232 fathom level worth £16 per fathom each. There are two at the 220 fathom level worth £12 per fathom each. There is one at the 220 fathom level worth £16 per fathom each. There are two at the 205 fathom level worth £16 per fathom each. There is one at the 165 fathom level worth £10 per fathom. There is one at the 178 fathom level worth £12 per fathom. There are 25 tribute pitches working by 80 men, tributes varying from 6s. to 12s. in the £. The number of persons employed is 514. During the past quarter, from the unusually heavy rain, the water so increased that for some time we were unable to work the bottom of the mine, at Goold's and Fortescue's, but we are glad to say that at present there is a little decrease.—(Signed) Chas. F. Bishop, Joseph Hosking, Stephen Williams.

The CHAIRMAN said: Gentlemen—It is, first of all, my duty to propose to you a resolution approving and adopting the statement of accounts before you. I dare say all of you have compared that statement with those that have gone before, and will not have failed to discover that it does not come up to the expectations which might have been fairly formed from the report and statement of accounts laid before you at the last general meeting, and also from what I said at that time. However, the difference has been caused entirely by circumstances over which your executive could not possibly have the slightest control. (Hear, hear.) The quarter has been a very difficult one for us. In the first place, we had such a deluge of water as probably has not been experienced in Cornwall for 40 years, and in consequence of that, and in consequence, also, of our having had to pump for some of our neighbours, we had such an influx of water as drove us out of our two bottom levels. Now, I endeavoured to explain to you at our last meeting what an important development had taken place in our mine during a few months preceding. In the very bottom of the mine—between the 225 fathom level and the 246 fathom level at Fortescue's shaft—we have for many fathoms in depth below the 225 a lode which filled the whole of that shaft, and which was valued for many fathoms down at £100 a fathom. At the very bottom—the 246 fathom level—it had dropped away north a little bit from its usual underlie, and only a portion of it was left in the shaft, and that portion was then worth £50 a fathom. It continued to dip away, and it is only of late—within the last few weeks—that it has curved again, and is now coming back into the shaft. Very little has been done on the lode, and in the report you will see that Mr. Bishop values a portion of it at £30 a fathom. That is a very important feature to bear in mind when you consider that this deluge of water has had an effect upon our returns of tin. We were driven out of those two levels entirely, and, therefore, we cannot get any portion of that piece of very rich ground—the richest we ever had in the mine, and shall probably not be able to do so for another month or two, until the lode comes further into the shaft. That is one reason why the report and statement of accounts before you does not come up to expectation. Another difficulty over which we could have no control was the breakage at one of our stampers. It is what I call our small stamper—carrying only 32 heads of stamps—and without any notice at all the axle over the pinion broke, and consequently the 32 stamps became idle in a day, and remained idle for a week or two, and by the time it was repaired even more than that; consequently we lost a great deal of tin we should have had from these stamps. Another bit of misfortune we have had during the past quarter is that tin has continued to drop, and that, as I shall presently show you, has made a considerable difference on our returns for the quarter. Taking all these things into account, my own impression is that we have no cause for discouragement—much less for despondency—in examining the figures before us, and, on the other hand, I think we have very good reason to be thankful that things are in as comfortable a state as they are. In the first place, our loss of tin for the whole quarter has been about 16 tons per month. The quarter before this was one of 16 weeks, and, therefore, it is scarcely fair to compare the gross amount of tin returned during the last quarter with the large amount of tin returned in the previous quarter, which was 303 tons. During this quarter the return has only been 213 tons. We must judge of it by comparing the average quantity of tin returned during each month of the quarter, and I find that the average return on the previous quarter was 75 tons odd, and the average return on this quarter was 71 tons odd. There has, therefore, not been a very great falling-off there. Then, with regard to the price of tin, it has dropped almost continuously until we have received for the whole quarter about the lowest price for our tin that we have ever had to receive for a whole quarter. We have had less on two occasions—one not very long ago—about 12 months ago, and one a good many years ago. Now, of course, the price of tin is a subject far beyond me, but a very much greater authority than I am—a gentleman, who, whatever people may say, is a very high authority in the matter, Mr. Strass—wrote to the papers the other day to the effect that he believed that during the next 12 months or so we shall see the price of tin go up from £10 to £15. Now, if it had gone up during this

quarter, or if it goes up £10 during the next quarter, that upon the present out-turn would mean something like £2000. That would have totally altered the whole character of the figures before you, and we should have had a splendid return and a very good dividend. However, we must hope that the price of tin will improve a little bit. There seem to be signs of it. During the past week or two the price of tin has gone up more than £1 a ton—£2 a ton in fact—and curiously enough, it is now just at the same price it was at this time last year. Now, this week in last year tin did make a move. In the months of February and March it went up 30s. a ton, in April another £2 a ton, and in the month of May it reached the highest price attained in that six months—viz., £68 per ton. Well, if this is the beginning of a similar improvement that we are witnessing now, in the course of a few months we shall be very well satisfied. I, myself, should very much like to see tin at about £70 a ton, but I am not sure that I should like to see it much higher, for then we should certainly have much more competition and much more tin thrown into the markets from the Straits than now. For I gather, from the best authority I have been able to get hold of, that the Straits people are losing money on their tin, and that they cannot produce and sell their tin in this market at such low prices as they are doing now, except at a big loss. Now, if there is any truth in that, during the next few months we shall be sure to see things get better. At present we must simply look the situation in the face and make the best we can of it, and seeing the difficulties I have shown you we have had to encounter during the past quarter, believe the very best that could have been done down at the mine has been done. Further, I believe that the mine never looked in a better condition than it is to-day. Therefore, as to the property, we have nothing to regret during the past quarter. As a producing property—an immediately producing property—we have to regret that we have not made a profit as we did last quarter and earlier. At the beginning of the quarter we had some sort of hope that we should have done considerably better. We have not, however, done so, and we have got to face during the past quarter a loss which is, after all, a comparatively small one. We have sold during the quarter 213 tons 16 cwt. of tin, and to show how gradual the falling off has been, but at the same time how great, I may mention that in the first month of the quarter we returned 76 tons of tin for the first month, 71 tons for the second, and for the third month—when the full force of the unfortunate flooding came upon us—we only returned 65 tons. So that, altogether, we have returned and sold less during the past quarter by about 15 tons or 16 tons, than we should have done if tin had not gone down in that way. As I pointed out to you just now, that may, perhaps, be better expressed by saying that we have lost at about the rate of 5 tons per month; because the previous quarter having been one of 16 weeks, you cannot compare the gross amounts. Unfortunately, we got the lowest price we have had for tin for six months, at all events. We got only £39 5s. 11d. per ton for it. On the other hand, our expenses, I am sorry to say, have increased very considerably. The influx of water has involved the use of extra pumping and extra coal, and if we had not had a very magnificent engine upon the property, I do not know what the result of the late flood would have been. However, there has been no hitch there; our pumping machinery there is of the first class. At Fortescue's we have got one of the biggest in the county, so far as I know. Our friend, Mr. Lane, was able to visit the mine a short time ago, and he will, no doubt, have something to say as to what he saw there. Our expenses have increased, and I am bound to admit that they have increased not only during the past quarter, but all the way through for nine months. Of course we had been getting a little more tin before, but the consideration is one to which we must draw our manager's attention. It is a very sore subject with him, because, as I said just now, I thoroughly believe he has done his very best under the difficult circumstances to which I have alluded, but if tin remains at its present price, he will be bound to do something or other better than his best, and to economise a little further than he has done. We must have a conference with him in as gentle a way as possible. Nine months ago our expenses per ton of tin returned were £36 7s. 4d., a ton, while 12 months ago they were only £35 6s. 11d. That last, I think, is the lowest price we have ever been able to produce our tin at; but then we were getting close on 80 tons a month. Now we are only getting 70 tons or less. The next quarter it was £36 7s. 4d. per ton of tin sold; the next it rose to £37 7s. 8d., while during the past quarter it has been £40 9s. 8d. Now, I wish to say a word or two about that, because I know a good portion of that increase has been caused by the circumstance I have mentioned—the extra coal consumed and other expenses in consequence of the flooding of the two bottom levels, and I may show you what a tremendous item coal is in our expenses. During this quarter we have actually paid £1815 6s. 8d. for coal at the rate of over £7000 a year, and out of the £40 9s. 8d., our total expenses per ton of tin, this represents no less than £14 6s. 3d. That is a very large item in our total expenditure, with which I do not suppose Mr. Bishop, or anyone else, could deal. So long as we get the water we shall have to consume the *pro rata* quantity of coal to keep it out of the mine. Our costs for labour have been £5042 11s. 10d., which, I may remark, works out at £23 11s. 9d. per ton of tin sold. Then our total for merchants' bills has been £3060 11s. 3d. Some people would say that that is a very heavy item, and so it is, but we cannot help it. The dues have been £336 17s. 1d., and all other charges £218 0s. 9d. The coal for the whole year of 1895 came to over £7800. Now, taking all that into consideration, I do not think, when we come to work out what the actual profit or loss has been, that there is any great fault to be found with the result. Our total costs were £8687 19s. 11d., and our total sales £8401 18s. 1d. That does not bring into account at all the sum brought forward from the last account into this of £685 15s. 10d. That leaves us with a loss on the whole quarter's working of £256 9s. 10d., which might have been a vastly greater sum. But if you bring forward the balance of last account—£685 15s. 10d.—that, with the total sales, which were £8401 18s. 1d., leaves us a balance in favour of the mine of £429 14s. We, therefore, are £256 9s. 10d. worse off than at the beginning of the quarter, and we may, therefore, count it as so much loss. With these remarks I beg to move the adoption of the report and accounts.

Mr. F. G. LANE, in seconding the resolution, said: Gentlemen—I visited the mine a fortnight ago, and under circumstances of which, I feel sure, you will approve. It appears that our agent, Captain Bishop, has been ill for a long time, and that the troubles on the mine, owing to the increase of the water and the stoppage of the engines by our neighbours, have embarrassed us to a considerable extent. Well, we will pass over all these difficulties. They are all over now; your mine is thoroughly drained, and in an excellent condition for progress and development. In regard to the question of the reduction of costs, I do not see how this could be accomplished. Of course, as the season progresses and we get dry weather, the consumption of coal will not be so great. Our engines are in perfect condition, and I think that the test that has been given to them by the quantity of water we have had in the mine has proved them to be engines of surpassing capacity. Our pumps are now in a very sound condition, though it was a matter of great anxiety to the various agents on the mine as to whether the work of pumping out the large quantity of water we had there would not affect the pumps in some way. With regard to the loss on the year's working, that is not quite so large as the Chairman tells you, because there is £70 to be deducted for law charges. Moreover, the cost per ton of tin has, of course, increased through the quantity produced being so much less, and the consumption of coal so much greater. You must not look upon the past quarter as a fair test as to the cost of producing tin; you must take the average of the 12 months. Twelve months ago we had great difficulties through frost and other things; but this past quarter has been an exceedingly difficult one to deal with. I was told by the agents that in a few hours we had a 6 inches fall of water on the surface. That, of course, all went down into the mine, and we were not assisted, as we should in

justice have been assisted, by our neighbours. However, Captain Bishop is doing his very utmost, and I do not see how possibly a reduction of costs could be effected. We must look to a larger return, and that we shall have when we have begun to drive our bottom levels at Fortescue's shaft. Then we shall have a full lode to work, whereas now we have only a portion of a lode, and are only taking out that part which is valuable to us. At present there are large developments going on, and they must continue to go on. By and bye we shall get a greater return from this work than we are getting now. At present in our slime pits and works we are not getting so large a production, but it is of a better quality. All I can say is that you must rest satisfied with what you are doing there. You are doing better than any other mine in the county of Cornwall—(hear, hear)—and what more can you expect at the present price of tin? We must look forward to an improved market for our metal; an improved return we are sure of. Lower costs will come when we get dryer weather and less pumping charges. Yours is a great mine, and the works throughout the whole of the mine are in perfect order. Everything possible has been done for the comfort of the men. All the charges are now made upon the revenue account. There ought to have been a capital account, and unless you get a capital account, so as to be able to work the mine properly, you cannot expect the large profits we ought to have. If we had a capital account to-morrow you would have a large interest for your money. It is a question whether you may not look forward to a time when something of the sort will be proposed. I do not know whether it would not be the sooner the better.

The CHAIRMAN said that Mr. Lane had raised a most important subject for consideration, and one that required to be thought out. No doubt he was "driving at" Limited Liability. His own opinion had always been that properly, fairly, and honestly managed, there was no reason why a mine should not be as well and profitably worked under the Cost-book system as under Limited Liability. At the same time, if a majority of the shareholders were in favour of Limited Liability he would not use his large interest in the mine to oppose them. (Hear, hear.)

The motion for the adoption of the report and accounts was then put and carried unanimously.

The CHAIRMAN moved a vote of thanks to Captain Bishop and the other agents. During the past year Captain Bishop had exhibited indomitable energy and perseverance in the company's interests. No doubt his anxiety in connection with the company's property had been largely responsible for Captain Bishop's illness.

Mr. S. O. GRAY seconded the motion.

The CHAIRMAN remarked that during Captain Bishop's illness the works underground have been supervised by Captain Bishop's son, whom he had always considered to be an energetic young fellow, and one who was likely to make one of the best mining men of the county.

The vote of thanks was then put and cordially passed, it being understood that Mr. Bishop, the younger, was included therein.

The CHAIRMAN: That finishes our business, and I hope the next time we meet we shall be able to show you a very much better state of things.

A hearty vote of thanks to the Chairman and committee terminated the proceedings.

ANGLO-WESTRALIAN AND GENERAL EXPLORATIONS COMPANY (LIMITED).

The statutory general meeting of shareholders in this company was held on Thursday, at Winchester House, E.C.—Mr. H. T. Michels presided, and stated that the directors were satisfied that the properties were undoubtedly of great value, and it would not be very long before they would be in a position to deal with profits realised. Since the beginning of October they had had about 25 men employed on the company's blocks. Specimens of ore had been found on one of the leases assaying as high as 70 ounces, whilst on the Home Rule No. 2 South the manager had written to say that he had cut the main reef, which was 20 feet in thickness, and was getting splendid stone, giving 10 ounces to 12 ounces per ton. The whole property gave such great promise that if the gold continued down to only 100 feet, and the reef maintained its present size, its value might be estimated at from £200,000 to £300,000. They expected the Treasure Trove Extended would shortly be self-supporting, and should very soon give the shareholders a fair return for their money. They had an ample supply of water, whilst they were also well off for timber and for all mining requisites and fuel.—A vote of thanks to the Chairman terminated the proceedings.

THE KINSELLA GOLD MINES (LIMITED).

An extraordinary general meeting of shareholders in the Kinsella Gold Mines (Limited) was held on Wednesday, at Winchester House, E.C., for the purpose of submitting for confirmation resolutions passed at a previous meeting, authorising the voluntary winding-up of the company for the purposes of reconstruction.—Mr. John Ball, who occupied the chair, in moving the confirmation of the resolutions, stated that the issue of the new company had been guaranteed without cost to the company, so that unless shareholders were prepared to subscribe for their proportionate holding the shares would be taken up by somebody else.—The motion was seconded by Mr. McDonald, and carried unanimously.

THE TOKATEA OF HAURAKI (LIMITED).

An extraordinary general meeting of the shareholders in the Tokatea of Hauraki (Limited) was held at Winchester House, E.C., on Wednesday, for the purpose of passing resolutions amending the company's Articles of Association, so as to comply with the Colonial Law.—Mr. Cecil Hartridge presided, and said that that was merely a meeting to confirm the resolutions which were adopted on a previous occasion, and, therefore, he should simply move their confirmation.—Mr. Witherford, in seconding the motion, remarked that he thought New Zealand was destined to take a prominent part among gold-producing countries. Its rich auriferous character showed that a small population could turn out by most primitive gold-mining appliances possible, and the application of scientific methods was quite revolutionising this state of things. But their thanks were not only due to scientific men, who had caused this revolution, but also to the Government, who were at the present time giving liberal subsidies for sinking shafts. Under all the circumstances he thought they had good reason to be satisfied with the New Zealand Gold Mines.—The special resolution was then adopted, and the meeting terminated.

THE VICTOR-WAIHOU GOLD MINING COMPANY (LIMITED).

An extraordinary general meeting of shareholders in this company was held at Winchester House, E.C., on Wednesday, Major-General Hutchinson presiding, in the absence of Mr. Wilson, when the confirmation of the resolutions bringing the company's Articles of Association into conformity with the Colonial Law was formally agreed upon.

SOUTH AFRICAN GOLD TRUST (LIMITED).

Subject to audit the balance to credit of profit and loss is £536,824 0s. 11d., and after deducting debenture interest and all outgoings their remains a net balance to credit for the year ending December 31 of £509,375 2s. 4d. Out of this amount interest on the preference shares, and an interim dividend of 5s. per share on the ordinary shares, have been paid, leaving with the balance of £25,880 6s. 2d. brought forward from previous year—£459,375 16s. 7d.—still available. The directors recommend that a dividend of 15s. per share be declared, free of income tax, making, with the interim dividend, £1 per share for the year, and that £50,000 be added to the reserve fund, leaving a balance of £221,375 16s. 7d. to be carried forward.

THE WESTERN AUSTRALIAN DEVELOPMENT CORPORATION, LIMITED.

An extraordinary general meeting of this corporation was held yesterday, at the Cannon-street Hotel, Mr. JAMES LIDDERDALE presiding.

The SECRETARY (Mr. W. C. Crosbie-Hill) having read the notice convening the meeting,

The CHAIRMAN said: Ladies and Gentlemen—I feel it a great honour to have the privilege of presiding at this meeting to-day, and at the same time my position is most pleasant in many ways than one. First and foremost, I am exceedingly happy to tell you that I am able to introduce to you to-day our consulting engineer—Mr. Frank Nicolas—of whom we have all heard so much. Mr. Nicolas has worked very hard indeed in all our interests, and in taking a well-earned holiday, which is, I understand, usual in Western Australia at about this period of the year, your directors suggested that if he could make it convenient to visit this country they would be most pleased for him to come and tell us, *vis a voce*, something about the various properties we are interested in. The further glad news I have to give is to tell you that the promise made at the meeting held in November last, when the payment of 100 per cent. dividend on the capital of the old corporation was announced, that another distribution would be made at an early date is now being fulfilled, and a scrip dividend of one McKenzie share for every five shares held in the corporation, equal to 40 per cent. per annum for the past six months' working, will be paid you within the next eight or nine days. I may also inform you that we are bringing out the Armadale Gold Mining Company on Tuesday, and that in accordance with the undertaking given to all the shareholders of this corporation, you will have a right to a prior allotment of shares, and all applications sent in by you will be entertained before those of the outside public. From this flotation a nice profit accrues to the corporation, and 'tout of it your directors hope to declare another dividend for the ensuing quarter. I have also great pleasure in stating that your directors have been offered several blocks of land in Western Australia, amounting in all to about 300,000 acres. I need hardly tell you that we attach the greatest importance in acquiring these large estates; they have been thoroughly surveyed, and the event of our carrying the negotiations through it will undoubtedly be the means of making your holdings still more valuable than they are at the present moment. No doubt you have observed in the Press that Mr. Francis Webster was sent out to Western Australia on January 17 by the P. and O. steamer *Rome*. It will be his duty to at once make a thorough inspection, and take charge of the development of the land under the company's control. I have now to deal with the special purpose for which the meeting was called. As you are all no doubt aware from the notices which have been sent you, it is proposed to increase the capital of this corporation to the nominal amount of £250,000, but it is not intended at the present moment to make an issue of more than £50,000. The balance will remain for issue at a future date, and will be available as the operations of the corporation become further enlarged, and opportunities arise for the employment of additional capital. Of course, what you all want to know from me to-day is what your directors propose doing with this present issue of £50,000. Gentlemen, it is your directors desire to acquire full controlling interests over certain properties which we have been interested in for some months past. Mr. Nicolas, whom I will call upon in a few moments, will tell you all about these properties, and I feel sure that when you have heard all that he has to say, you will not only pass unanimously the resolution which I shall move before I sit down, but will agree with me, and wish that we only had more properties of a similar kind, and that you could have the opportunity given you of finding double the amount we now ask you to sanction us to issue? I now move the following resolution:—"That the capital of the company be increased to £250,000 by the creation of 250,000 shares of £1 each, and that 50,000 of such shares be issued and offered in the first instance to the members of the company on the register of shareholders on February 17 *pro rata*. Any shares that may remain unapplied for by the said members the directors at the expiration of seven days may dispose of in such a manner as they think most beneficial to the company."

Mr. CANNON seconded the motion.

Mr. NICOLAS said that during the several months he had acted as consulting engineering for the corporation he had acquired for them interests in some very valuable properties. The Armadale, he believed, was to be brought out in a few days. The property comprised 30 to 39 acres, and so far as they could tell the main Armadale lode ran almost from end to end; in fact it could be traced, so far as the working had shown, for close upon 1500 feet. It was a very big lode formation, exactly similar to the Hannan's. On the surface when it was cut it was about 5 feet wide. They had struck the lode at a depth of 55 feet, but since he left the property the shaft had been sunk another 30 feet. The lode when he left averaged all along 19 feet 8 inches. He had taken careful assays and pannings from the whole length of the drive, and although they gave 1½ ounce he did not like to say he could mill that, but it would certainly mill 1 ounce. Even taking the mine at the depth at which he saw it he calculated that there were over 42,000 tons in sight. Beyond that he had not seen, and did not care to give any opinion, but if the manager's report was correct there were over 84,000 tons in sight. Being so near Coolgardie, they would not suffer from labour difficulties, and they were exceptionally well placed with regard to water. Not only had they a hill, but three or four hills. The mine ran across one hill, dipped down and ran up another hill, and from careful surveys taken both by himself and Government engineers it appeared that if they only caught 2 inches of rain during the whole year, they would have enough water to run a 40 stamp mill. The property was in a direct line between Mount Burgess and Coolgardie. Mount Burgess was 6 miles north of Coolgardie, to which the Government intend pumping water, either from the Salt Lakes, or from the Swan river, and for which purpose they had just voted £217,000. They would then be within 3 or 4 miles of Mount Burgess, and would have the first call, as it were, or the water before it reached Coolgardie. A 20 stamp mill was now being shipped, and it should be erected by the beginning or the end of May, and he hoped in June, or at latest in July, they would be getting very good returns. They had had several gentlemen reporting on the mine, and they all agreed with him that it was not a speculative venture, inasmuch as although they could not see into the bowels of the earth, the developments were quite sufficient to justify them in putting up even more than 25 stamps and getting to work at once. They would be able to work the lode on the side of the hill, which would be a great advantage. They were sending out power for 40 stamps. The cost per ton of mining and milling would be represented by about 7 dwts. Another mine in which they had an interest was called the Kaniva. They had heard a great deal about the water difficulty, but in the Kaniva the difficulty would be

NEW ISSUES.

THE "PRINCESS ROYAL" (CUE), LIMITED.

get rid of the water, at least five or six years hence. Two reefs ran through the large range of hills, and the simplest way to work the mine would be to put in crosscuts and quarry the reefs out of the hill. There was enough there, if they put up 25 head of stamps to last from five to six years. One of the reefs was about 5 feet broad, and the other varied from 10 feet to 16 feet. The bulk of the large reef which they had struck would give 1 to 1½ ounce on an average. The other reef was almost of the same quality of ore, but he would put the average at 1 ounce to the ton. He would be very much surprised if he could not turn out dividends at less than 8 dwts. of cost, and he hoped that it would not be much more than half that. Then they had an interest in a property called the Wheel of Fortune. They had struck the reef which had been found in the Australasian, which had given in that company an average of 9 ounces per ton. Where they had struck it gave 2 ounces. He had advised the corporation to go on prospecting it until they could prove it in length and depth more thoroughly than at present. They had another interest in a property called the Dorothy, which was about 3½ miles north-west of Coolgardie, and next to the Britons United. It was composed of 16 acres in all. When he left the reef was 25 feet broad, but since then cablegrams had been received stating, first, that it was 35 feet broad, and afterwards that it had increased to 45 feet. He could only vouch for what he saw himself, but he had absolute confidence in the gentleman who was in charge of the property. He was sure he would not send cablegrams to that effect unless they were true. The reef had been traced right through the property. His first assay gave 5½ ounces, but he was very suspicious of that because a broad reef giving 5½ ounces was not a very usual thing to meet with. Consequently he went more carefully than ever into the matter, but came to the conclusion that putting it at the very lowest it must be a 1 ounce reef. Here again the conditions with regard to labour and transport were favourable, and there was no reason why the mine should not pay on a maximum of expenses of from 7 to 8 dwts. Then they had an interest in a property called the Oratava, which was about 7 miles south of Coolgardie, and within 100 yards of the Hampton Plains Estates, which company had made efforts to get their boundary line across the Oratava, but failed to do so. They had two reefs 1 foot broad, and very rich indeed—he would not like to say how rich, but it was certainly 7 ounces. The ground, however, was very hard, and it would be very expensive to work. The other reef varied from 3 to 5 feet in width, and they had sunk upon it to a depth of nearly 100 feet, and driven crosscuts north and south. So far the reef had never been under 3 feet wide, and it had been up to 5 feet. The value of the ore was very regular, and gave from 2 to 3 ounces per ton. In milling they could calculate on getting over 2 ounces. They had a controlling interest in the adjoining mine, and were working the two together, and he had no doubt that by the time he returned, or, at least, a month or so afterwards, it would be a really first-class developed property. His instructions were to look out for other properties, and he succeeded in getting two mines which were really developed properties—the Glenloth and First Try. They had the Burbank's Reef, and they were bound to have success equal to that at Burbank's. They had struck a very rich patch in the Glenloth, and he was sure that it would give 50 ounces to the ton. When he returned particular attention would be paid to working this portion of the reef. He had omitted to mention, as regarded the Armadale, that not only had they the Armadale lode but the Ballarat lode, which, although it might not be as good as the other, he thought would certainly prove a very good lode. (Applause.)

Mr. GREY commented on the fact that no accounts of the company has been placed before the shareholders, and expressed the opinion that they ought not to be asked to make such a large addition to the capital of the company in the absence of them. He also thought that the amount of such proposed increase was excessive. He suggested the adjournment of the meeting.

The CHAIRMAN, replying to Mr. JOHN COLEMAN, said Sir William Young resigned from private reasons. He and Mr. Arthur C. Bailey were the only directors at present, but negotiations were on foot with two gentlemen who it was thought would be highly acceptable as directors, and it was hoped to bring those names forward at the confirmatory meeting.

Mr. COLEMAN moved, and Mr. GREY seconded, the adjournment of the meeting for one month, in order that the board might be augmented and the accounts submitted, but the amendment, on being put, received no further support, and the resolution was then carried *nem. con.*

A vote of thanks to the Chairman concluded the proceedings.

—The share certificates of the MONARCH SYNDICATE (LIMITED) are now ready for delivery on application at the offices, 8, Drapers' Gardens, E.C.

—The MYSORE GOLD MINING COMPANY (LIMITED) have sold the gold obtained during the month of December last, which realised £23,890 15s. 4d.

—The NUNDYDROOG COMPANY (LIMITED) have sold the gold obtained during the month of December last, which realised £12,325 13s. 7d.

—Certificates for shares in the CROWN UNITED GOLD MINING COMPANY (LIMITED) are now being issued. Mr. Stanley Bramall, 14, Angel-court, E.C., has joined the board of directors.

—Certificates of the re-issue of 20,000 shares of £1 each at a premium of £3 per share, in the CHAMPION REEF GOLD MINING COMPANY, are now ready for delivery in exchange for bankers' receipts for £4 per share.

—The CHAMPION REEF GOLD MINING COMPANY OF INDIA (LIMITED) have sold the gold produced in December, 1895, for £24,099 1s. 2d.

—The OOREGUM GOLD MINING COMPANY OF INDIA (LIMITED), have sold the gold obtained in December, 1895, for £23,295 4s. 5d.

—The OURO PRETO GOLD MINES OF BRAZIL has sold the gold obtained in December for £6030 14s. 5d.

—We have received an official intimation that an ordinary general meeting of shareholders in the NEW MIDAS ESTATE AND GOLD MINING COMPANY (LIMITED) will be held at the board room, Bettelheim-buildings, Johannesburg, at 4 o'clock in the afternoon on Tuesday, March 31.

—We are officially informed that the annual general meeting of shareholders in the CROWN DEEP (LIMITED) will be held at Johannesburg on Wednesday, March 18.

—We are officially informed that the capital of the JOKER (YALGOO) GOLD MINES (LIMITED), brought out by the Venture group of exploration companies, was subscribed for about twice over.

—A meeting of debenture holders in the PERUVIAN CORPORATION (LIMITED) is about to be convened in pursuance of an understanding arrived at on the hearing before Mr. Justice North. The motion in the action of Roper v. The Peruvian Corporation (Limited) and holders of debentures are requested to send at once to the secretary, Mr. Thomas E. Webb, at 66, Old Broad-street, E.C., their names and addresses, and the nominal amount of debentures held by them, in order that they may receive notice of such meeting.

A property of recent flotation, situated in the Murchison gold fields of Western Australia, which promises well, is the "Princess Royal" (Cue), Limited, which, as we gather from the official documents, has acquired the properties known as the Princess Royal Mines, comprising leases Nos. 222 and 653, extending over a total area of 12 acres, and situated within a mile of the township of Cue. They were purchased some time ago by the West Australian Gold Concessions (Limited), the vendors, upon the cable advice of their principal representative, Mr. A. Spencer Ellam, the full reports subsequently arriving. The favourable opinion originally entertained by Mr. Ellam was subsequently confirmed by additional reports by Mr. F. E. Harris, M.A.I.M.E., F. Inst. M. and M., England, and Mr. Thomas Butement, M.A.I.M.E., Assoc. Sch. Mines, Otago University, then manager of the Kangaroo Mines, Cue (which latter gentleman has since been appointed manager of the Princess Royal Mines). The pith of Mr. Ellam's opinion as to the capacity of the property is contained in the following sentences:—"The Princess Royal is one of the best developed mining properties near Cue. The payable character of the ore has been proved throughout the lease. A fair test of the value of the ore has been made, 73 tons returning 219 ounces 5 dwts. gold, after 80 ounces gold had been previously dollied therefrom." It will thus be seen that on a fairly extensive crushing the ore yielded over 4 ounces to the ton. To place the productive capacity of the mine altogether beyond question, however, a further crushing of 51 tons was ordered. "This ore," it is stated, "was taken as mined, and not picked in any way. The yield was 96 ounces 6 dwts. 12 grains of retorted gold, while an average sample of tailings assayed 12 dwts. 16 grains per ton, the total being 2½ ounces to the ton." It is hardly necessary to point out that results such as this may be taken to establish the gold-producing capacity of the property, since they are on quite a different level from the assays frequently quoted in connection with new companies. As Mr. F. E. Harris justly remarks in his report:—"The value of the ore has been demonstrated by the best judge, the mill, which is better proof than a ton of samples." Works have been pushed energetically forward during the last few months. The manager reported on December 2, 1895, that the south vertical shaft had reached a depth of 87 feet, whilst the north vertical shaft was 90 feet deep. He also cabled on January 10, 1896, as follows:—"Princess Royal struck lode south vertical (shaft): the vein is strong and well defined; contains visible gold." A 10 stamp mill is already on order, and is under contract for delivery by the end of next month. According to estimates by Mr. Harris, the net profits on the working of 10 heads of stamps should be close upon £50,000 per annum—a very good beginning. The purchase price has been fixed by the vendor company, who are the promoters of this company, at £60,000, wholly in fully-paid shares, or partly in fully-paid shares and partly in cash, entirely at the option of this company's directors, leaving £20,000 in shares available for subscription for payment of preliminary expenses and the provision of working capital. The vendors have thus shown their willingness to accept the whole of the purchase consideration in shares, should the step meet with the directors' approval, and this seems to show that they are confident as to the company's future. According to the latest information to hand, there are at present 4000 tons of ore in sight. The capital of the company is £80,000 in 160,000 shares of 10s. each.

THE BRITISH SHEBA CONSOLIDATED MINING COMPANY (LIMITED).

This company has been formed with a capital of £100,000, in 200,000 shares of 10s. each, of which 7s. is paid. The working capital is £30,000. It has purchased the lease of a large mining property situate in the parish of Stoke-Climsland, Cornwall. This property is 2 miles long, and contains, it is stated, three mineral veins, the largest of which—viz., the Champion lode—is of the width of 30 feet. About £200,000 has been spent in plant, machinery, and opening up several veins of rich ore, the former owners having raised and sold £80,000 worth of minerals from what were practically surface workings. The principal minerals found on the property are tin and arsenic. A well-known mining expert, Mr. Joseph Pryor, F.G.S., M.E., who has made a full report of the mine, estimates the profit so soon as the bottom levels are laid open at £1000 per month, with a proportionate increase as developments progress.

British Sheba shares are now being dealt in on the London Stock Exchange, and quoted in the official lists of the leading daily and financial papers.

The following is from Mr. Pryor's report:—

"GENTLEMEN,—I herewith submit my report upon this extensive property, situated at Stoke-Climsland, Cornwall, having the River Tamar situated at its eastern boundary, and extending in a westerly direction for about two miles on the course of the mineral lodes. The property is, in fact, large enough for two mines, being about twice as extensive as the Dolcoath Mine, and it may some day be advantageously divided. There are five tin lodes running nearly east and west through the property, but operations have been hitherto confined to only one of them—the Champion lode—which is of so striking a character that exceptional importance and interest attach to it. In the first place, the lode is of remarkable size and strength, and, in addition to being tin-producing, it contains in association therewith an abundance of arsenical pyrites, now a very valuable mineral, arsenic being worth over £14 per ton (now £18 per ton). It also produces copper ore associated with silver. The engine shaft is sunk on the Champion lode to the 96 fathom level below adit, and levels driven at 10, 20, 40, 55, 64, 75, and 86 fathoms. At 96 fathom, or present deepest level, the lode has been cut across from wall to wall, and proved to be of the width of 30 feet. The immense size of the lode is an important factor in estimating the future productiveness of the property. The average width of the 10 lodes of Cornwall is only 3 feet. This great lode is, therefore, equal at this point to an average width of 10 ordinary lodes, but it is not merely a tin lode, for with the tin is arsenic in abundance. During the period of erecting the numerous buildings, machinery, &c., upon the property, the underground operations were necessarily interrupted. Nevertheless, the tin, arsenic, &c., actually raised and sold, realised the large sum of £84,000. This is an extraordinary return from what, after all, must be regarded as shallow workings. The beneficial outlay on this property has been very great. The buildings consist of engine and boiler houses, furnaces, arsenic works, flues and chimneys, the dressing-floors, arsenic refinery, ovens, grinding and packing floors, account houses and offices, laboratory, assay offices, &c. There are pumping, winding, stamping and crushing engines, boilers fitted with Martin's patent doors, Oxland's calciners, reverberatory ovens, tin stamps, and floors, copper ore crushers, &c., &c. When the bottom levels are properly laid open, the returns should by way of commencement be about 25 tons of tin and 150 tons of arsenic per month, and this should leave a profit of about £1000. This result would be greatly augmented as more levels are driven, and ore ground laid open. In conclusion, we have solid facts to go on:—(a) An exceptional yield of minerals from shallow workings. (b) A shallow mine, instead of a very deep, and consequently, very expensive, one to work. (c) Sales of minerals amounting to about £84,000, thus sufficiently attesting

the productiveness of the lode. (d) An inexhaustible mass of mineral. (e) A lode of great magnitude. (f) Other tin-producing lodes to which I need not now refer. (g) The benefit of years of development. (h) The advantages of a very great outlay; and (i) An exceptional combination of two metals, both of which are commercially valuable."

He finishes by saying:—

"I write from practical experience, having before I left England to take the management of gold mines abroad, been joint manager when these mines were being developed, and the works at the surface being laid out."

(Signed) Joseph Pryor, F.G.S., Mining Engineer."

THAMES HAURAKI GOLD FIELDS, (LIMITED)

This company has been formed, with a capital of £300,000, in 300,000 shares of £1 each, of which 25,000 will be held in reserve, for the purpose of "acquiring and otherwise dealing with the mining properties and plant situated in the Hauraki gold fields of New Zealand, and the special rights, interests, and benefits attaching thereto (including the New Zealand Government subsidy)." The properties referred to are the following:—(a) The Queen of Beauty Extended, consisting of 47 acres, and being a special claim granted by the New Zealand Government for 21 years from 1888; (b) The Deep Sinker, consisting of 93 acres, and being a special claim granted by the New Zealand Government for 21 years from 1895; (c) The Deep Levels Consolidated, consisting of 110 acres, and being a special claim granted by the New Zealand Government for 21 years from 1895; (d) The benefit of the Government approval of the Queen of Beauty Mine as the deep level site in the North island, with all privileges attaching thereto; (e) All plant, machinery, buildings, and development work for mining purposes on the properties above-mentioned. These properties, we are informed, have been reported on by quite a small crowd of engineers—some of them men of eminence—among whom may be mentioned:—Mr. James Park, F.G.S., director Thames School of Mines, in a paper read in Melbourne, March 14, 1891, and in an extract from a report dated July 2, 1894; Sir James Hector, K.C.M.G., head of the Geological Department, director of the Geological Survey of New Zealand, under date Wellington, April 23, 1891; Mr. T. A. Rickards, mining engineer, in the *Mining and Engineering Journal* of New York. In accordance with powers conferred upon him by the Mining Act, 1891, Amendment Act, 1894, "the Minister of Mines," we are informed, "has agreed to give £1 for £1 to an amount not exceeding £25,000 for the erection of the necessary pumping machinery and the sinking of the shaft. The benefit of this arrangement, as well as of concessions obtained from the Thames Borough and County Councils, will be conveyed to this company, together with the Queen of Beauty Extended, Deep Sinker, and Deep Levels Consolidated Mines, having a total compact area of 250 acres."

THE ARMADALE GOLD MINING COMPANY (LIMITED).

This company, with a capital of £100,000, in shares of £1 each, has been formed to acquire the following gold mining leases, viz.:—The Armadale, No. 601, about 11 acres; Armadale East, No. 2390, about 12 acres; and Armadale Extended, No. 2187, about 15 acres, comprising 38 acres or thereabouts, situated about 4 miles north of Coolgardie on the well-known belt of auriferous ground on which the following properties stand, viz.:—New Victoria, President, Day Dream, Square and Compasses, and Westralia, all of which are opening up large bodies of free milling ore. The Armadale Leases are joined on their south-eastern boundary by the Ballarat Mine, and in addition to the Armadale lode proper, Mr. Frank Nicolas states that the Ballarat lode runs through the property, as shown on the sketch plan. The property has been very favourably reported on for the vendors by Dr. Charles Chawing, F.G.S.; Captain Charles Truscott, M.E.; Mr. A. Octavius Watkins, A.R.S.M., F.G.S.; and Dr. H. A. Ellis, all of Coolgardie. The directors have had several interviews with Mr. Frank Nicolas, M.I.M.E., of Coolgardie, and have obtained from that well-known expert an exhaustive and highly satisfactory report.

LATEST FROM THE MINES.

CABLEGRAMS AND TELEGRAMS.

ALASKA TREADWELL.—Cablegram from Alaska reports the following clean-up for month of January:—"Period since last clean-up, 31 days; number of days mill ran, 25½; bullion shipment, \$56,075; ore milled, 21,293 tons; sulphurets treated, 364 tons; of bullion there came from sulphurets, \$17,940; gross expenses for period not able to state."

ANGLO-FRENCH EXPLORATION.—In view of the reports as to shutting down some of the mines on the Rand, the directors cabled to their Johannesburg house on the subject, and received a cable in reply to the effect that the East Rand Proprietary Mines (Limited), and all its subsidiary companies, in common with all other leading companies, are continuing, and will continue, work to the utmost capacity.

BALAGHAT MYSORE.—The London office have received the following cablegram from Mr. Richards:—"120 ounces of gold obtained from 2000 tons of tailings; partial clean-up."

BONNIE DUNDEE.—The directors have received the following cablegram from Charters Towers:—"Have crushed during the month 447 tons of quartz from Victory reef for 520 ounces of gold. The reef in the No. 2 level south is 12 inches thick, and worth 25 dwts. per ton. The approximate value of the above return is £1750."

BURMA RUBY.—The result of the mining for the month of January was 12,800 loads washed, producing rubies valued at 42,000 rupees.

CASSEL COAL.—A cablegram received gives the output for the month of January as 15,880 tons. Mine was closed for a fortnight during the month.

CARATAL.—Return for period from December 1, 1895, to January 9, 1896:—"25½ days run, 971½ tons crushed, 1256½ ounces gold produced. Company's proportion, gross value about £2508."

CHAMPION REEF.—The directors have received a telegram from the mine, dated February 3, giving last month's return of gold as follows:—"4850 tons of quartz produced 5967 ounces of gold, 4210 tons of tailings produced 324 ounces of gold; total production for the month, 6291 ounces of gold."

CONSOLIDATED GOLD MINES OF WESTERN AUSTRALIA.—We are informed that the Aster property at Towerana, belonging to this company, has had a trial crushing of 2 tons, which yielded 5 ounces 15 dwts.

CROWN UNITED.—The company has been advised by cable of the arrival in Western Australia of the machinery for the mine.

DARIEN.—The directors have received a cablegram from their manager (Mr. Woakes), which they interpret as follows:—"The 100 foot crosscut shows very good grade ore at 50 feet, and was continuous at 70 feet at time of cabling."

DON PEDRO.—Produce for month of January, 590 ounces 14 dwts. 18 grains from 450 tons, equal 13 dwts 7 grains per ton.

FORBES REEF.—A telegram has been received from the mine, stating that the result of the crushing for the month of January is 118 ounces of gold.

GREAT BOULDER PROPRIETARY.—Copy of cablegram received from the manager, Mr. Zebina Lane:—"Crushed own battery 148 tons, yielding 953 ounces; public battery 93 tons, yielding 269 ounces. Total gross yield, 1222 ounces." A further cablegram has been received from the mine:—"Jumpers withdrawn. They pay the amount of cost incurred to date."

GREAT TALUNGA.—The manager who has just arrived out cables as follows:—"I consider it a most valuable property; main shaft in good working order; in panning out visible gold is seen."

HANNAN'S NAPIER.—Mr. R. Gibson, M.E., manager, reports by cable for the fortnight ending January 21:—"Cross-cutting in order to connect the shafts—12 feet to connect—will start prove ore body in the bottom of the deepest shaft—Gibson." He further reports by cable for fortnight ending February 5:—"Connection has been completed between the shafts. We have struck a large body of gold-bearing ore in the crosscut going north. The width of the lode is not yet determined. Consider this find of great importance."

HANNAN'S REWARD.—The following cablegram has been received from the manager:—"Shaft has reached a depth of 312 feet; last 16 feet consist veins of gold-bearing quartz, pieces of quartz very rich in free gold. Vein is almost horizontal; consider feeders to main reef a most important point. Developments are now driving a crosscut from 300 feet, intersect main reef; expect an abundant supply of water, and payable reefs; the developments of the mine fully justify the expectations which have been formed."

HAURAKI.—The directors have received the following information from the manager:—"Total amount crushed 316 tons; ounces of gold, 2059. Approximate cost, £2000; profit, £4200. Shaft has reached a depth of 220 feet. Mine extensively worked and looking better."

ISLE OF MAN MINING COMPANY.—The secretary has sold 100 tons of this company's ore (chats) at £9 3s. 6d. per ton.

JOHANNESBURG CONSOLIDATED INVESTMENT COMPANY.—Have received the following cable from Johannesburg, dated 3rd inst.:—"Publish emphatic denial of reported shutting down of mines owing to political complications; all our mines are working."

MARBELLA IRON ORE.—The directors have received the following telegram from the mines:—"Output of ore for January, 1431 tons."

MACATE.—Copy of cable to hand:—"Will ship bullion amounting to £356 January 29. 21 days' milling."

MENZIES GOLD ESTATES.—Have struck water in 3051 Fiveen shaft, 3200 gallons fresh daily. Pumping plant now under order from Sydney. We think there will be a considerable increase in the supply after further developments.

MONARCH SYNDICATE.—The following cable has been received in reference to the Syndicate's Arcadia group of mines at Murchison, Western Australia:—"Have struck a large body of ore at 110 feet; average width of lode is 18 feet. The reef shows visible gold. Development opening up splendidly."

MONTANA.—By cablegram from the mine, the directors are informed that the total output for January was 6400 tons of ore, which contained gold, 2510 ounces; and silver, 19,650 ounces. The estimated realisable value of the same is \$62,400.—Expenditure: Working expenses on revenue account, \$31,900; outlay on developments, \$12,500; extraneous expenses, including insurance, \$3100; permanent improvements and machinery, \$100; total, \$47,600; net result, \$14,800.

MOUNT MORGAN (Queensland).—The London board have received the following cable from the head office:—"Are now having heavy rains; all the dams are full."

MOUNT ROWE CONSOLIDATED.—The directors have received the following cablegram from their manager:—"Have struck an important body of ore in the Regina lease at the 160 feet level."

MYSOORE GOLD.—The directors have received a telegram from the mine giving the return of gold for the month of January as follows:—"5351 tons of quartz produced 5043 ounces of gold; 4570 tons of tailings produced 999 ounces of gold; 1820 tons of tailings (cyanide process) produced 307 ounces of gold; total production for the month, 6349 ounces of gold."

MYSOORE REEFS (Kangundy).—The directors have received the following telegram, dated February 6, giving the result of last month's return of gold as follows:—"412 tons of ore crushed has yielded 179 ounces of retorted gold."

MYSOORE WEST AND MYSOORE WYNAAD CONSOLIDATED (Tank block).—The manager cables for January:—"After a mill run of 736 hours crushed 550 tons, yielding 544 ounces of gold. Twenty stamps were started February 4." Official Note: Only the new 10 stamps were used in January, the old 10 stamp battery being under repair.

NEWHOUSE TUNNEL.—The following cable has been received from Denver, dated February 1:—"We have driven during the past month 163 feet. The rock is exceedingly hard."

NEW RIETFOUNTAIN.—The London agents announce receipt of the following cable:—"Production for January, 2076 ounces, 50 stamps, 24 days."

NEW QUEEN.—The directors have received the following cablegram, dated Charters Towers, February 4, giving result of crushing for past fortnight:—"200 tons, yielding 320 ounces of gold. Have drawn upon you for £1000. Shaft sunk 9 feet during past fortnight."

NIGER GOLD.—Last month's crushing yielded—battery, 1164 ounces; cyanide, 910 ounces; total, 2074 ounces.

NORTH CHARTERLAND.—We are informed that the North Charterland Exploration Company (Limited) have received cable advice that the exploring party sent out by them under Lieut.-Colonel R. G. Warton has arrived at Missala.

NUNDYDROOG.—The London office have received a telegram from the mine, giving the return of gold for the month of January as follows:—"2800 tons of quartz produced 3162 ounces of gold; 700 tons of tailings produced 161 ounces of gold; total production for the month, 3323 ounces of gold."

OOREGUM.—The directors have received a telegram from the mine, dated February 3, giving last month's return of gold as follows:—"5207 tons of quartz produced 5080 ounces of gold; 5137 tons of tailings produced 1100 ounces of gold; total production for the month, 6180 ounces of gold."

PESTARENA.—Gold return for January:—415 tons of ore produced 695 ounces of gold, equal to 1 ounce 13 dwts. 12 grains per ton.

PIGG'S PEAK DEVELOPMENT.—The directors have received the following cable:—"Emlimbo mill worked 32 days, crushed 435 tons, yielded 88 ounces; gold estimated to be worth £230; average samples of tailings give assay 5 dwts. per ton." Note: The Emlimbo mill is quite separate and distinct from the Peak reef mill, where preparations are being made to start 30 heads of stamps.

SUTHERLAND REEF.—The following telegram has been received from the mine, dated Leydsdorp, February 6:—"Have discontinued stopping until main shaft is down; 20 stamps worked 30 days four hours, crushed 1874 tons, producing 124 ounces. Expenses £2200, including sinking of main shaft."

SHEBA GOLD.—Mr. Howard Hill has resigned, and his successor, Mr. A. A. Blow, of Denver, Colorado, will sail from London in March, to take up his appointment as general manager.

SILVER KING.—The following cable has been received from the manager at the mines:—"January: Mill worked, 28 days; crushed, 1900 tons; produced, 9000 ounces; shipped, 11,000 ounces; expenses, \$13,500; bullion on hand, 8600 ounces."

TAMWORTH.—The following message by cable has been received from a member of the advisory committee:—"Just visited Nundle according to your request. Find machinery all there, but erection will take six weeks longer. Mine looking splendid. Enough in sight in the rich 8 ounce reef and the 2 ounce reef to pay for the mine and all spent yet. Ballantyne pushing on tunnel to cut the rich reef. Strongly advise you to supply money he requires immediately for putting the mine in dividend-paying condition in two months more."

TOLIMA.—The following cablegram has been received from the superintendent:—"Frias estimated return for January, £4500; Frias estimated profit for January, over £1300. In the above return, fine silver is valued at 33d. per ton."

UNITED RHODESIA.—The company has received the following cablegram from their Bulawayo offices:—"Inez reef. Recent development 100 feet level most favourable."

VAN RYN.—Production for month of January, by cable:—"Mill. Number of days working 25, number of stamps working 50, tons milled 3880, number of ounces recovered 1725.—Concentrates. Production for month, in ounces, 24.—Cyanide works. Number of tons treated 3730, number of ounces recovered 585; total amount of gold recovered 2334 ounces."

VICTORIA GOLD MINING ASSOCIATION.—The following cablegram has been received at this office:—"260 tons crushed yielded 427 ounces gold."

THE BOARD OF TRADE RETURNS.

January Imports and Exports.

THE Imports amounted to £38,473,856, against £36,743,481 for January, 1895; an increase of £1,730,375. The exports of British and Irish Produce and Manufactures amounted to £21,127,168, against £18,224,226 for the same month last year; an increase of £2,902,942. The exports of Foreign and Colonial Merchandise show an increase of £938,449; the figures being—January, 1896, £4,825,707; January, 1895, £3,887,258. The increase is nearly 5 per cent. in the imports, about 16 per cent. in the exports of home, and over 24 per cent. in the foreign products. The following increases are shown:—Imports. Raw goods: Metals, £80,781; chemicals, £215,889. Manufactured goods: Iron, £84,660; zinc, £8811.—Exports: Raw goods. Coal, £183,874.—Manufactured goods: Metals, £225,236; machinery, £214,998 (mining, £42,239 and £58,213 compared with the same month 1895 and 1894 respectively); chemicals, £99,192; coal products, £32,892.

The returns only coming to hand late yesterday, we are reluctantly compelled to leave over our tables till next week.

BLUE SPUR AND GABRIEL'S GULLY CONSOLIDATED GOLD COMPANY (LIMITED).

An extraordinary general meeting of the Blue Spur and Gabriel's Gully Consolidated Gold Company (Limited) was held on Wednesday, at Winchester House, Old Broad-street, E.C.—General Sir John Stokes presided, and commenced his remarks by giving an account of the general position of the mine. The shareholders had heard by circular that the clean-up at the beginning of December resulted in obtaining such a quantity of gold that they had been enabled to pay off the remainder of the debt due to the bank. The company were now entirely free from debt, and they were in full possession of the mine. The mine was in good working order, and they now had nearly £1000 in hand. The Chairman then read a long report from the general manager (Mr. Howard Jackson), which stated that since February, 1891, the mine had paid off a debt of £18,000, including interest. The object of the meeting was to alter the Articles of Association, which had been rendered necessary in consequence of the passing of the Mining Amendment of 1895 by the legislature of New Zealand, which provided that there should be a transfer in the colony. The Chairman concluded by moving a series of resolutions altering the Articles of Association, which were seconded and carried.—The proceedings then terminated.

The directors of the Brownhill Proprietary Gold Mines (Limited) are at present engaged in forming a subsidiary company to work three out of the 10 leases owned by them in the Hannan's district. The area of the property to be acquired by the subsidiary company is about 48 acres. Captain Vawdrey cables as follows regarding these three leases:—"999. The shaft is 51 feet deep, average width of lode is 20 inches. Have driven in upon the vein for 80 feet; looks encouraging.—922. Have driven in upon the vein for 70 feet.—40 feet level. Average width of the lode is 2 feet, average sample from the dump gave 30 dwts. 70 tons dumped.—988. The shaft is 60 feet deep; expect to strike the vein soon.—999 and 988. Position has improved."

CONSOLIDATED GOLD MINER.—Recent advices from the fields state that:—"On the Consolidated Gold Mines of Western Australia (Limited), Coongandine, a drive is being put in to the south from the underlie shaft, and prospecting is being carried on at the south-east end. The well on the Coongandorth is going down in hard ground, and yielding very little water. The well on the machine site is giving an increased yield, but still not enough for crushing purposes. Two Huntington mills are very nearly ready, and a third is lying at Condon awaiting transport. The pumping machinery is all delivered and in course of erection. There are 300 tons of average stone at grass, and at least 2000 tons reserved in the stopes. The prospects continue good. Here again more miners are wanted."

Investors in West Australian Mines take a lot of chances of the property falling in value, as the workings are carried down, owing to the reef or lode becoming smaller or poorer than it showed on the surface. This is too often the case, but it is curious that so many of the West Australian Mines should be just the reverse. This welcome feature seems to characterise the Hannan's district, and the report just published of the continuous improvement with depth, in the East Wealth of Nations Mine, shows that part of the field to be also worth watching. The East Wealth did not show much at the surface, but it is reported that a drive along the reef at the 100 feet level disclosed a splendid reef of great width, and carrying a high average of gold all the way.

COETZEESTROOM ESTATE.—The secretary has received advice from the manager at Coetzeestroom, under date January 11, that political events in the Transvaal have in no way affected the operations of this company. The development of the estate continues to be exceedingly satisfactory. The mill was still stopped for want of labour, but additional Kafirs were coming in, and the manager anticipated an end of this trouble. Telegraphic advices dated December and January state that a further 168 ounces of gold have been recovered by cyanide process from old tailings. From too fine crushing in the past the slimes were excessive, which will be remedied in future treatment. The levels driving on Thomas' reef are producing gold ore, which is being sifted and accumulated.

MINING IN CORNWALL AND DEVON:

NOTES ON MINING IN THE WEST.

(FROM OUR SPECIAL CORRESPONDENT.)

MINING is just now in a condition of suspended animation. It is not that condition of collapse which precedes dissolution, but rather a mere suspension of activities until certain remedies can be applied. The chief remedy is capital, ready money planked down for the fair, full, and rapid development of mining properties which have been worked for a century or more. The plain, blunt fact is, that Cornish mine adventurers have come to the conclusion—and it is a pity they did not arrive at it years ago—that mining, for the sake of merely finding employment for a certain number of men, is a very dear form of philanthropy—the money spent on expensive work underground might as well be employed at surface in charitable purposes if that is the only object gained. And the candid truth is that as things have been going on in the last year or two, this has been the only effect that a certain amount of work has been found for a doubtless very deserving class of men, and people have had to pay through the nose for it. The price which has been paid for this philanthropic mining has opened the eyes of the Cornish mining adventurer, and he has come to the conclusion that he has done his part fairly well. The position he takes up now is that he believes in the commercial value of the mining properties; he is willing to put down a good sum of money provide the mines are put on a firm business basis, and provided also that other people will come in and put some money into the concerns. This is gradually being brought about; it has been accomplished in several of the mines, and there are yet some of the best properties to which this may be applied. The most pressing is Carn Broa and Tincroft, the amalgamation of which we have before referred to. These are two of the largest and best known mines in the county, and their records are a sufficient indication of their value as mineral-producing properties. The existing shareholders are fully prepared to put a good many thousands of pounds into them, but they insist that a further sum must be found from outside. In this they are actuated by a desire to give the mines a fair chance, and they realise that unless there is a good, substantial working capital, the last state of the industry will be worse than the first. Negotiations are still proceeding for the raising of the capital, and Mr. C. V. Thomas, the solicitor to the two companies, has been out of the county for the past fortnight, with what success we are unable to say. Tin can undoubtedly be raised in Cornwall at a sufficiently low cost to be remunerative even if the price continues below the average of the past quarter of a century.

FORTUNATELY the Wheal Basset and South Frances amalgamation has been carried through, and by this time probably the agreements entered into on behalf of each of those old companies with the new "Basset Mines (Limited)" Company have been carried into effect. The resolutions authorising this course were this week confirmed by both bodies of shareholders. South Frances is in an unfortunate condition as the result of the burning of the engine house a month or two since, and reading between the lines of the speech of Mr. Oats at Wheal Basset, on Tuesday, it is obvious that a goodly number of the men hitherto employed there will find themselves out of work. It is probable, however, that room will be found for some in the Wheal Basset part in the more vigorous development which will now go on there, but a large number will have to wait until the water at present in South Frances has been forked out before they can resume their occupation. Captain James is not the man to employ more cats than can catch mice, and he is not going to return tin unless it can be done at a profit. To bring up a lot of tin, and place it on an already glutted market at a loss seems a suicidal policy, and it certainly will not be adopted in connection with this company.

THE East Pool-Wheal Agar business continues unsolved. There was a meeting of miners at Redruth on Saturday, at which it was resolved to send a deputation to Lord Robartes and Mr. Basset, the lords of the two mines, with the object of bringing pressure to bear on the two companies. It was a very funny meeting—an East Pool meeting—in which nearly all the speaking was done by an East Pool blacksmith and a lander employed in the same mine. The men had a meeting with Lord Robartes, and his lordship undertook, we understand, to write Mr. Hattersley, urging on him the desirability of referring the whole thing to arbitration. This is the only possible solution, and though at the present moment public sympathy is no more with one mine than the other, the feeling strongly is that if the basis on which an amalgamation shall take place is fixed by an outside man, the difficulty might be settled in a week.

INTEREST is once more centreing in Dolcoath (Limited), in view of the meeting which will take place in a week or two. The accounts made up to December 31 have been audited, and are ready for presentation to the directors. There are a good many things which will be discussed at the meeting if there be an opportunity, if rumour is to be believed, but former Dolcoath meetings have proved very tame affairs, after the rumours which have been flying about before them. Captain Josiah Thomas has recovered wonderfully from his illness, and for some months now has been well-nigh as active and assiduous as he ever was in the personal control which he exercises at the mine, while Captain Arthur Thomas has won golden opinions from all with whom he has been brought into contact in his management of the concern.

Mr. Gould struck the right note in his speech from the chair at the recent meeting of shareholders in the Wheal Gravel Mining Company. As he pointed out—supporting his position with that abundance of figures always at his command—there is no ground for discouragement in the mine's record for the past three months. To all practical purposes the mine has paid for itself, and that is something with tin values at their present low figure, and the necessity to combat the stress of floods. There is, moreover, much consolation—which is more than a set-off to the hundred or two pounds which measure the quarter's loss—in the reflection that the mine never looked better than it does to-day. This satisfactory state of the mine is also being improved by the wise and conservative method of development, pursued by the company's agents, under the committee's sanction. There is reason, therefore, to believe that while the mine never looked better than to-day, it may get into even finer trim before many months are past. The signs of an impending improvement in the price of tin are an additional ground for expecting good results in the future.

ADVICE has been received by telegraph that a branch of the Bank of New South Wales has been opened at Kalgoorlie, formerly known as Hannan's (Western Australia).

THAMES HAURAKI GOLDFIELDS (LIMITED).

INCORPORATED UNDER THE COMPANIES ACTS, 1862 to 1890.

IN 300,000 SHARES OF £1 EACH, OF WHICH 25,000 WILL BE HELD IN RESERVE.

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BROKERS.—Messrs. HAGGARD, HALE & PIXLEY, 36, Austin Friar, E.C.
 Messrs. HARDIE & TURNBULL, 42, George Street, Edinburgh.
SOLICITORS.—Messrs. MORGAN, PRICE & MEWBURN, 31, Old Broad Street, E.C.
CONSULTING ENGINEERS.—Messrs. EDWARD RILEY & CO., 2, City Road, E.C.
AUDITORS.—Messrs. FORD, RHODES & FORD, 81, Cannon Street, E.C.
SECRETARY AND OFFICES.—S. G. BRUFF, Esq., 54, Old Broad Street, E.C.

Buses	\$68						90 15 0	Dillon	003	010	43 6 0
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C. PASS & SON (Limited), BRISTOL,
 ARE BUYERS OF
 LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS,
 ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c.
 and DROSS or ORES containing
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HENRY WIGGIN & CO. (Limited),
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 Good prices can be obtained for low produce Copper Ores. Send
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**COLORADO MINING AND OTHER
 INVESTMENTS.**

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 SPECIALITIES—Gold Properties; Leasing and Development
 Syndicates.

CABLE: "TONGE, DENVER." Code: "A. B. C." Fourth Edition.

COMPANIES AND LEGAL ANNOUNCEMENTS.

* Advertisements are inserted in this column at the rate of
 9d. per line, with a minimum charge of 7s. 6d.

**THE EMERALD (REWARD) GOLD MINING
 COMPANY (LIMITED).**

NOTICE IS HEREBY GIVEN, that an ORDINARY GENERAL
 MEETING of the Shareholders of this Company will be
 held at Winchester House, Old Broad Street, in the City
 of London, on TUESDAY, the 11th day of February, 1896, at Two
 o'clock p.m., for the following purposes:—

To receive the Report of the Directors and the Audited State-
 ment of Accounts of the Company for the 12 months ended the
 30th September, 1895;

To elect a Director;

To elect Auditors; and for other business.

By Order of the Board,

J. JAMISON TRURAN,

Secretary.

185, Gresham House,
 Old Broad Street, London, E.C.,
 30th January, 1896.

**THE EASTER GIFT PROPRIETARY
 GOLD MINES.**

SPECIMENS of Rich Gold-bearing Quartz from these Mines,
 which are situated in the Northern (White Feather) portion of
 Hannan's District of Western Australia, are now ON VIEW at the
 ROYAL AQUARIUM, WESTMINSTER.

ARMY  CONTRACTS.

COAL, COKE, AND KINDLING WOOD.

SEALED TENDERS for the SUPPLY of COAL, COKE, and
 KINDLING WOOD, for Military Services, during 12 months, from the
 1st April, 1896, will be received until Twelve o'clock noon on the following
 dates:—On WEDNESDAY, the 19th day of February, 1896, for COAL and
 COKE; and on FRIDAY, the 21st day of February, 1896, for WOOD, by the
 General Officers Commanding the undermentioned Districts:—

SCOTTISH DISTRICT	Edinburgh.
NORTH EASTERN DISTRICT	York.
NORTH WESTERN DISTRICT	Chester.
WESTERN DISTRICT	Devonport.
SOUTHERN DISTRICT	Portsmouth.
SOUTH EASTERN DISTRICT	Dover.
EASTERN DISTRICT	Colchester.
THAMES DISTRICT	Orkney.
WOLWICH DISTRICT	Woolwich.
HOME DISTRICT	Whitehall, S.W.
ALDERSHOT	Aldershot.
GUERNSEY AND ALDERNEY	Guernsey.
JERSEY	Jersey.
BELFAST DISTRICT	Belfast.
DUBLIN DISTRICT	Dublin.
CORK DISTRICT	Cork.
CURRACH DISTRICT	Curragh Camp.

Forms of Tender and Conditions of Contract (showing approximate quanti-
 ties), may be obtained on application at the above-named Offices, by letter
 addressed to the Assistant Adjutant General, or in person between the hours of
 Ten and Four o'clock, and no Tender will be entertained unless made upon the
 form so obtained.

The Tenders must be properly filled up, signed, and dated; and no Tenders
 will be noticed unless delivered in time, at the above-named District Offices,
 under sealed envelope, marked "Tender" on the outside.

A. MAJOR, Director of Army Contracts.

War Office, Pall Mall, S.W., 5th February, 1896.

DIARY.

Saturday, February 8.

Just in Time Gold Mines, Limited, Winchester House, 12.

Monday, February 10.

Don Pedro Gold Mining Co., Limited, Win. House, 3.

Monatari Gold Mining, 110, Cannon-street, 3.

Tuesday, February 11.

Hoffman's Mount Margaret, Winchester House, 11-30.

Emerald (Reward) Gold Mining, Winchester House, 2.

Coromandel Gold Mining Co., Cannon-st. Hotel, 2-30.

Thursday, February 13.

Gold Lands Corporation, Limited, Cannon-st. Hotel, 2-30.

Friday, February 14.

White Feather Reward, Winchester House, 12-30.

Spitzkop Farm Gold, Winchester House, 2.

Rhodesia, Limited, Winchester House, 2.

The register of members of the Transvaal Gold Exploration
 and Land Company (Limited) will be closed from February 12
 to March 12, both days inclusive, for the purpose of framing a
 list of shareholders in whose names it is intended that the
 certificates for the shares in the Lydenburg Mining Estates
 (limited), to be received from that company, shall be made out.

The Mining Journal, RAILWAY AND COMMERCIAL GAZETTE:

An Illustrated Record of Mining, Metallurgical, Railway,
 Financial, Industrial, and Engineering Progress.

ESTABLISHED IN 1835.

THE MINING JOURNAL, RAILWAY AND COMMERCIAL
 GAZETTE, published every SATURDAY MORNING, price
 SIXPENCE, is recognised throughout the World as being the oldest,
 most influential, and most widely circulated Journal devoted to the
 interests which it represents. It circulates

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Amongst Mine Owners, Capitalists, Investors, Mining, Metallurgical
 Engineers, Manufacturers, &c., &c.

THE MINING JOURNAL, RAILWAY AND COMMERCIAL
 GAZETTE has correspondents and sources of information in almost
 every quarter of the globe. Its policy is absolutely independent;
 its circulation is cosmopolitan.

THE MINING JOURNAL is neither controlled, nor is any
 interest in it held or exercised, by any mine owner, speculator,
 or syndicate; and it is in no way connected with any share-
 dealing agency.

TO CORRESPONDENTS.—Letters on Editorial Matters, or containing
 literary contributions should be addressed to "THE EDITOR." All matter
 intended for insertion must be written on one side of the paper only.
 The return of rejected manuscripts cannot be guaranteed. The Editor invites
 correspondence and items of news or information from readers in all parts
 of the World.

TO SUBSCRIBERS.—The Annual Subscription to THE MINING
 JOURNAL, including postage, is for:—

The United Kingdom, £1 4s.;

Abroad, £1 8s.;

payable half-yearly in advance. It can be purchased at all Railway Book-
 stalls and Newsagents throughout the United Kingdom for 6d.

TO ADVERTISERS.—The following is an abbreviated Scale of Charges for
 Advertising:—Companies' Prospectuses, £12 12s. per column, or £20
 per page; Companies' or Legal Announcements, 9d. per line, with a mini-
 mum charge of 7s. 6d.; Sales by Auction, Publications, For Sale, Wanted,
 &c., &c., 8d. per line with a minimum charge of 4s.

Displayed (Trade) Advertisements of 2 inches in depth (or more), Single
 Column measure, will be inserted at the following rates:—For 52 inser-
 tions 2s. 6d. per insertion for each inch in depth; for 26 insertions 3s.
 per insertion for each inch in depth; for 13 insertions 4s. 6d. per insertion
 for each inch in depth. Terms for special positions and contracts may be
 had on application.

ADVERTISEMENTS (which should in all cases be sent direct to
 THE BUSINESS MANAGER) can now be received for the forthcoming issue
 of THE MINING JOURNAL, RAILWAY AND COMMERCIAL
 GAZETTE, on FRIDAY, at 18, FINCH LANE, E.C., up till 5 p.m., and
 at 3, DORSET BUILDINGS, SALISBURY SQUARE, E.C. until 9 p.m.

Editorial and Advertisement Offices:

18, FINCH LANE, LONDON, E.C.

Telegraphic and Cablegraphic Address: "TUTWORK, LONDON."
 Codes used: "A.B.C.," "Morning's," and "Universal."

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LONDON: FEBRUARY 8, 1896.

SOUTH AFRICAN AFFAIRS.

ALTHOUGH there is much to engender the gravest
 anxiety regarding the present position of affairs in
 South Africa, there is, at the same time, much upon
 which to base re-assurance and hopefulness. Indeed, we may
 go so far as to say that the latter preponderates. A great deal
 depends, of course, upon the attitude which will be assumed by
 President KRUGER and the Boer Government, but there is as
 much ground for expecting that they will display moderation,
 as that they will put in force severer measures against the
 Uitlander population than they have employed hitherto. As we
 have said on previous occasions, we may place some dependence
 on the shrewdness and foresight which President KRUGER so
 eminently possesses, and these qualities must naturally dictate
 to him a line of policy which must be beneficial both to the
 foreigners and to the mining industry. In whatever light we
 may regard him, we cannot withhold from him a certain
 sympathy, which should go a long way to moderate our
 judgment. We must admit that, apart from his human and
 patriotic feelings, he holds a position of peculiar delicacy, and
 the high duty which he is called upon to perform compels him
 to listen, not solely to the voice of his own conscience, but to the
 voices of thousands of his own countrymen, whose destiny his
 mind and hand control. He may well fear, therefore,
 to place too great a power in the hands of the
 Uitlanders, for how can he tell for what a purpose

it will be used? For, instead of patriotically securing
 the stability and welfare of his Republic, which his
 humanity and his duty dictate, he would be doing the very
 thing to bring about its downfall. We do not say that would
 be the first object of the Uitlanders, but it is how the
 President would look at it. We say, therefore, that we can
 sympathise with him in his efforts to look after his
 Republic first, and the foreigners second, for if he argued
 and acted as we have surmised, he would have the
 whole weight of human experience and weakness in
 his favour. Even in face of the declarations of the
 Uitlanders, we cannot regard them as above suspicion.
 It would be ridiculous to credit them with every perfection,
 and as possessing not even the symptom of a failing. Never-
 theless, there is much that the President can concede without
 imperilling the future of his country—concessions which, as
 we have said on recent occasions, are demanded by justice
 and humanity. We still think he will make them, if we
 will only be patient, and let the agitation first subside into
 calmness.

We cannot but regret the action of a section of unscrupulous
 individuals in South Africa, who have been exceedingly ener-
 getic in their endeavours to intensify the crisis, to poison the
 public mind, and to embitter it against the Boer Government.
 Telegrams signed by "British Residents" have been published
 in the Press accusing the Boers of all sorts of monstrosities,
 even to indignities upon women, which we know now to be
 absolutely unfounded, and which many days ago were dis-
 countenanced by our Colonial Office. Such conduct as this
 cannot be too severely denounced. We say, again, that we
 cannot express surprise at the President's suspicion, if these are
 some of the members of the Uitlander population seeking
 redress at his hands. If these are the individuals claiming our
 sympathy, we cannot be moved on their behalf to any profound
 compassion. Whatever "Tom PAUL's" weaknesses may be,
 they are on a far higher plane of humanity than theirs.
 Apart from the Uitlanders themselves, much depends upon
 the action of Mr. CHAMBERLAIN, and it is to the latter we may
 look with much expectation and hope. At the present moment
 the entire nation reposes the most implicit confidence in him.
 He has already exhibited great wisdom at a critical moment, and
 it is not likely this gift will forsake him in future phases of the
 situation. We cannot think he will remain satisfied without ob-
 taining some reliable guarantee from the Government that the
 grievances of the Uitlanders will be to some degree redressed.
 Even if force should be ultimately necessary—though peace is
 above all, to be desired—it is possible and probable he will not
 be averse to displaying it, though it may be regarded as a very
 remote contingency.

Chief interest is centred at the present moment in the pre-
 liminary inquiry into the charges of inciting to rebellion and of
 high treason against members of the so-called Reform Com-
 mittee. As yet, however, little can be said, for the report of
 the trial is, of necessity, very meagre, and it would be far wiser
 to await the full evidence before forming a final judgment. On
 reading the evidence so far, one cannot avoid the impression
 that it is all against the accused, and that it confirms many of
 the rumours which were recently current as to the smuggling
 of arms and other measures taken by the Uitlanders to support
 their demands for reform. But it is too early yet to judge
 them. Not less interesting is the arrival and presence
 in this country of Mr. CEIL RHODES, and energetic
 efforts have been made by the Press to get this
 gentleman to make public the course of action he means to
 pursue. But one of Mr. RHODES' prominent characteristics is
 his profound reticence. He can never be persuaded of the
 advantages of publicity, if he is convinced himself of the greater
 need for secrecy. He does not care an atom for public anxiety,
 if it does not coincide with his own interests. Therefore, he will
 remain dumb until he chooses to speak in his own good time;
 but, happily, that is now not far distant. There is a rumour
 that a meeting of the Chartered Company will be held in a
 fortnight's time, but whether that rumour be founded upon fact
 or no, it will very likely be held before the month is over. Until
 then we must restrain our anxiety, and withhold our judgment
 until we have the facts fully and clearly before us.

Respecting the mining industry, the news is also hopeful. It
 appears that the proclamation recently issued by President
 KRUGER has had a happy effect. We know it would suit a
 certain class of people to do all they could to injure the industry
 temporarily, but, happily, their wishes and efforts are becoming
 known, and successful opposition is being made to them. There
 is no doubt that the labour difficulty is still serious, but every
 effort is being made to overcome this, and native chiefs are
 giving active assistance. We, therefore, have great reason to
 look to the future with cheerfulness, and to anticipate the mining
 industry being placed on a more firm and solid basis than it has
 ever occupied before. Of course, we are speaking now of the
 mines and not of the market. It is not likely we shall
 witness any great activity here for some time to come. This is
 only to be expected. We could not expect a boom, or even a
 tendency to one, under existing circumstances. The best thing
 is to wait and to hold, and to pick up judiciously. Such judg-
 ment, fortunately, is being displayed. Much depends, too,
 upon the outcome of the Chartered meeting, and upon the effect
 of the speech of Mr. CEIL RHODES. Altogether, the situation is
 intensely interesting, but not, as we have said, devoid of
 encouragement.

WESTRALIAN GOLD MINING.

AT the present moment the aspect of gold mining enter-
 prise may be said to be that of suspense. It is a sus-
 pense largely relieved of anxiety by the knowledge that
 sound judgment and technical authority have approved the
 investment of British capital in new auriferous districts, but it
 will continue to exist, and, to a certain extent, to prevent any
 wide development of mining until the actual success of the
 operations now proceeding. Deep level mining on the WIM

Watersand is the first of the three great mining ventures which are still hesitating in the experimental stage; the Rhodesian gold mines are the second; and, though in a lesser degree, Western Australia may also be placed in the same category. There is every reason to repose implicit faith in the future of the deep levels, inasmuch as the preliminary development so far carried out by the sinking of shafts has corroborated the important theory of engineers upon the flattening of the reefs. Rhodesia stands in somewhat similar case. Every authority who has visited the country is sanguine as to its prospects, and convinced of the existence of true fissure veins. But this opinion is not upheld by the positive evidence of gold production, and is not likely to be for the next two or three years, until the railway through Bechuanaland to Bulawayo is completed. The position in Western Australia differs advantageously from this in that the country is already producing gold, and that the output is upon a considerably advancing scale. It is more than probable that the entire production of gold from that part of the world for 1895 was nearly a million sterling. At the same time, it cannot be denied that Western Australia is, to a large extent, still upon its trial. Results are not yet forthcoming from the large sums of money which were invested in Western Australian mines during the past year, and until they are it is only natural that there should be a certain lull in the tendency of British capital to flow in that direction. Apart from the depressing influence of "bear" movements, and the political troubles in the Transvaal, it was only to be expected that the conditions we have mentioned should have led to the present cessation of new issues in the Mining Market, and should have directed the attention of investors to home rails. Happily, there is good foundation for believing that the period of waiting for results from Westralia will not last long, and that such results as will lead to another boom in that direction will shortly be forthcoming. With the return of the many consulting engineers and company directors who have lately been inspecting the Colgardie and other fields, we are placed in a position to express a more definite opinion upon the general character of the West Australian deposits than has hitherto been possible. A good deal of injury has been caused to the district by the excited statements which have been made about the fabulous richness of certain finds. Practical mining men immediately became suspicious of the permanence of a deposit when the surface working is marked by the discovery of "bonanzas." Geological research and actual mining work have, however, now clearly shown us that while Westralia is a country of nuggets, it is not a country of nuggets only. The surface deposits of decomposed quartz with occasional rich patches, but with no assurance of permanent gold-bearing qualities as the workings descend, are valuable not only in themselves, but also as serving to attract to Western Australia the practical digger and prospector who desires to exploit a claim by the labour of his own hand. People of this class are valuable in any mining district, and it is clear that there is every prospect of their success in Western Australia. But besides these surface deposits, there are in the country several series of hard micaceous quartz reefs which run in easily traced directions for several miles, and which, in some cases, have been found to run parallel in the same property. These reefs are perfectly uniform in character, and with proper equipment and methods it will be possible to work them at a profit to the great depths which have been tried in the United States and on the Witwatersrand. This fact is of infinitely more importance for the future of Westralian gold mining than any number of brilliant discoveries of rich patches which have so dazzling an effect upon the unlearned speculator. Competent and cautious experts venture the opinion that Westralia as a mining field will be workable upon a basis of 1 to 2 ounces to the ton. This is a far richer content of gold than that which has resulted in a yield of several millions sterling of dividends from the Transvaal mines during the past year. The only things needful to secure similar results for Westralia are moderate capitalisation and efficient management. The difficulties of working, due to the absence of water and of proper transport, are not, after all, very formidable. Dry crushing is now established as a regular metalliferous process, and the Colonial Government is ready to supplement private enterprise in the sinking of wells and other means of obtaining water. The example of what has been done at Broken Hill in this direction by private enterprise alone should suffice to show that the scarcity of water will not long oppose an obstacle to the development of the Westralian gold fields. All that shareholders should insist upon assuring themselves is that the true fissure reef is upon their property, and that they have not paid too much for the privilege of exploiting it. These two facts being granted, we have no doubt that the Westralian gold fields will rival those of the Transvaal in the importance of their contribution to the world's gold supply and the value of their return to capitalists.

TO OUR READERS.

Owing to extreme pressure on our space, we are compelled to hold over the following Mine Reports, which reached us last night at a late hour:—Nundydroog, Yerrakonda, Alamillos, Fortuna, Mysore, Mysore Reefs, Nine Reefs, Bayley's Reward, Sheba, Pestarena, Victory Gold, &c.

NOTES AND COMMENTS.

The annual report of the directors of the Coromandel Gold Mining Company of India, which will be presented at the ordinary meeting next Tuesday, may be described as fairly encouraging. The work done during the past year has certainly resulted in an improvement in the mine, and should lead shareholders to look forward to the future with some considerable degree of hope. They will remember that last year the Prospect shaft looked very promising, the lode here showing from 2 to 3 ounces per ton. We are now informed that the

new chute in this shaft has turned out to be a valuable one, and that in the winze below the deepest level of the mine the lode is 4 feet wide, and is yielding over 1 ounce of gold to the ton. Assays from this chute have occasionally been as high as 4 or 5 ounces to the ton. During the past year the reserves of ore have been very considerably increased—viz., by no less than 16,000 tons, so that on September 30 last they amounted to no less than 24,000 tons. As a result of the improvement in the prospects of the mine, the directors seem confident that shareholders may look forward to substantial and regular returns of gold very shortly. The reserves of ore already discovered are quite sufficient to keep the mill fully employed for the next two years, crushing at the rate of 1000 tons per month. Bearing this in mind, the company will start milling under favourable conditions. Mr. Llewellyn's (the superintendent) confidence in the mine is unshaken. Though there are a great number of difficulties to overcome in developing the mine, it is not altogether an expensive one to work, and for this reason, even though the ore may not be of very high average, the superintendent sees no reason why it should not be able to yield a good profit.

It will be remembered that in September last the shareholders in the Emerald Reward Gold Mining Company met to consider serious proposals for the future of the company, owing to the fact that the original property had not come up to expectations. The results of working were most disappointing, demonstrating that not only had the rich quarry stone come to an end—at any rate for the time being—but also that the reefs which showed on the surface had not developed at depth into a permanent body of ore. In consequence of this, certain proposals were placed before them as to the advisability of disposing of the mine and of acquiring others, or of developing the property more extensively in depth, and yet at the same time purchasing and working others. The shareholders unanimously decided on the latter, a decision which was undoubtedly the most prudent, and which, at the time, received our commendation. Since then other properties have been acquired, but at the present moment it is impossible, of course to anticipate and predict how they will turn out. Since the meeting in September the directors have engaged and sent our Captain James Penberthy to take charge and succeed Mr. Porritt, whose term of service expired last December. On arriving at the property the new manager made an extensive examination of it, and as a result of the knowledge thus acquired he strongly recommends its further development. The directors of this company have just issued their annual report, and the accounts included therein show a net profit on the year's working of nearly £800. The quantity of ore treated for the 12 months was only 1968 tons, which produced 2363½ ounces of gold, or an average of 1 ounce 4 dwts. per ton, of the net value of £8990 10s. 10d. Since the September meeting the directors have purchased the Shamrock Mine at a cost of £600, and Captain Penberthy cables that the lode here is looking promising. This is really all the encouraging information the directors have to lay before the shareholders. It is not exciting, it is true, but at the same time it is not altogether discouraging.

In a leading article this week we deal with the position and prospects of the mining industry in Western Australia, and we hope that the views therein expressed will assure our readers as to the future of the colony. Of course, we do not go so far as to say that every enterprise will meet with brilliant success. We know there will be many blanks and prizes, and unhappily that the former will outnumber the latter. Nevertheless, the prizes are likely to be of so brilliant a character that they will make up for the disappointment of the blanks. Now that affairs are in a somewhat uncertain condition in South Africa there is every likelihood that Western Australia will command the attention of investors and speculators for some time to come. Indications of a boom have already manifested themselves, but, unfortunately, when everything was looking most hopeful, a check came in the way of damaging rumours anent the Great Boulder Mine. Happily these rumours have received contradiction, and this check, therefore, has been defeated. We say this as introductory to a few words on the statutory meeting of the Great Boulder Perseverance Gold Mining Company. Any company designated as Great Boulder is, at the present moment, watched with a considerable amount of interest, and this company is one to whose future great importance is attached. The Chairman, naturally, was unable to say much, but he gave evidence of some important development work, with highly promising results. Should progress be made in the same ratio in the future as during the past few months, there need be little fear as to the future, though, of course, one cannot speak on this point, as yet, with any certainty.

The consumptive requirements of the United States in the way of pig iron are colossal. Not content with importing this material from England during 1895 to the value of £243,327 (whereby they formed our third best market) the States have, according to the complete annual statistics of the American Iron and Steel Association which have reached this side during the week, made 9,446,308 tons. This means the largest year in America's ironmaking history, for it is nearly 42 per cent. more than in 1894, and about 1 per cent. more than in 1890, when the largest previous production of that country was attained. All the large pig iron producing states shared in the greatly-increased production in 1895 over 1894; and, as might be expected, the most notable increase was in Pennsylvania, which produced nearly 50 per cent. of the total. Strange as it may seem, five States made less pig iron in the whole of 1895 than in 1894—namely, Connecticut, New Jersey, Georgia, Michigan, and Colorado. Alleghany County alone produced 2,054,585 tons, which was nearly 600,000 more than the production of Ohio, more than double that of Illinois, and nearly two and a-half times that of Alabama; and yet Ohio, Illinois, and Alabama made splendid records in 1895 as compared with 1894. Alle-

ghany County made 43 per cent. of the total production of Pennsylvania in 1895. The great increase in the total production of pig iron last year over the year preceding was largely caused by the extraordinary demand for Bessemer pig iron, which, in turn, was caused by the sustained call for structural steel, owing to the general trade revival. The resumption of this trade revival in the States, which during the first week of February has been more pronounced than at any time since the opening of 1896, is very auspicious for English iron and steel masters.

TRANSATLANTIC iron and steel activity certainly means that America is making for itself more largely; but, at the same time, it means also that in many departments she is buying more from outside as well, and when these two positions are balanced England will be found to have gained more than she has lost. If anyone doubts this, a glance at last year's iron and steel imports into the States from the United Kingdom should convince them. Even in tinplates the decline for the year was less than 2 per cent. in quantity, whilst in some other descriptions there were very large improvements—for instance, in pig iron from £71,437 to £213,327, or more than three times as great; in railroad iron from £96 to £27,320; bar, angle, bolt, and rod from £14,114 to £24,716; cast and wrought from £44,621 to £64,494. We repeat that by trade prosperity in the States, Britain gains more than she loses. Our imports of pig iron into the States in 1896 are again pretty sure to be very heavy unless reverses occur, for the small quantity of all unsold pig iron stocks in the United States when 1896 opened was unique. It was only 4½ per cent. of the year's total production, representing about 15 days' production of the active furnaces. In the whole of the States when the present year opened there were 242 furnaces in blast and 226 out. Since then a few have been damped down or blown out, but now things are once more moving, preparations are being made for a restart.

An American newspaper, circulating widely through districts wholly given up to mining, reminds us that in reckoning up the stores of latent wealth—latent, that is to say, in the sense rather of being existent, than of lying within the sphere of probable future development—industrialists with speculative tendencies must not leave out of count the gold contained in the ocean waters. No abnormal feat of the imagination is required to conceive a company promoter thinking with many a melancholy pang of the opportunities lost by the impracticability of turning to useful account, as well the huge masses of gold lying beneath the sun's photosphere, as the enormous quantities carried in solution by the sea. An honourable representative of the *jeunesse dorée* is reported to have turned away from sorrowfully contemplating the giraffe, with the remark—breathing a pathos wholly its own—"If I had a neck like that what a collar I would wear!" Similarly the financier, adept at company promoting, may be thought of, without any violation of the probabilities, as gazing up at the unclouded luminary, or down into the azure sea, with the reflection:—"If I only could, what a company I would promote!" Getting gold from the sea is no new idea. Various inventors have nibbled at it. The last proposal is to lay iron and copper plates in series and attach them to sea-going vessels, so that what is vaguely termed "a sort of electrolysis" may take place, leaving a gold incrustation upon the copper. What a pity the days of the South Sea Bubble are over! But is the notion wholly beyond scientific possibility? Feats at one time deemed even more impracticable than this have, in the fulness of time, been accomplished.

For those interested in England's industrial development, the report of the recent delegation upon the Continental iron and steel trades will bring home with added force the supreme importance attaching to a cheap and effective railway system. Numerous examples are quoted to show that with parity of railway rates England would have nothing to fear from the most spirited and determined competition. Unfortunately, as things at present are, there seems little chance that we shall soon be similarly circumstanced with our Continental neighbours in this matter. The difference between German and Belgian railway rates, on the one hand, and English rates, on the other, is sufficiently wide not to be easily, or quickly, bridged over. As compared with our own, the Continental railway systems are managed on an altogether dissimilar plan. In Germany, France, and Russia there is no gentle wooing of the railway authorities to elicit greater concessions or advantages to trade. When there is any disparity between commercial needs and railway regulations—either as to rates or other matters—the Government puts down a heavy hand, and the disability vanishes as if by magic. With us the railway authorities occupy a practically impregnable position, and as partially the result of this there is a disastrous handicapping of British industries. Attested on such an unimpeachable authority, there is no ambiguity in the way of a clear conception of this fact, and when it has been brought forcibly home to the minds of the railway authorities, we may hope that some steps may be taken to alleviate a condition of affairs which is at present largely responsible for the disastrous state of the Northern metal industries. The spirited departure lately taken by the Great Western Railway to meet the needs of agricultural producers in the way of freightages, justifies the hope that the difficulty has only to be recognised to be dealt with. There would be no rhyme or reason about a demand for a wholesale chopping down of railway rates, but some modification might at least be gracefully conceded by the railway companies, and those who have applied the mathematical test know how hugely a comparatively trifling rebate aggregates on a big turn-over.

A WELL-KNOWN Parisian print gives plaintive utterance to the woes inseparable from the thankless task of publishing share quotations. All newspapers who have launched out in this direction cannot long remain in ignorance of the responsi-

bilities they have taken upon themselves. When shares in which there are few dealings are carefully honoured with quotation, our Parisian contemporary is harassed with complaints that the prices given cannot be realised, and when the City editor, in self-defence, replies that the prices "are merely nominal," he is assailed with indignant queries of "Why, then, do you quote the shares?" But if with weathercock-like sensitiveness to the winds of popular fancy, the unhappy editor should strike the shares from his list, there arises a chorus of clamorous demands for redress from those interested in the companies thus curtly snubbed. As our French contemporary humorously remarks, the seller is always able to put his own price on the shares, and the circumstance that no purchasers snap eagerly at the figure is no proof that it is an exaggerated one. He must grip tenaciously at his holding, remind himself that the many are frequently wrong and the few as frequently right, and look patiently forward to the time when reason shall rise triumphantly and carry his shares to a point almost commensurate with their intrinsic value. Another delusion popular with the investor is that shares in which there are free dealings frequently remain frozen up at one price for long periods together. Nothing could be further from the fact. Had the darkest of Greek philosophers lived in our day and country, he might have cited the Stock Exchange quotations in support of his doctrine that "all fleets away."

THE MINING MARKET.

FRIDAY EVENING.

A quiet week, closing with increased activity and higher prices in the South African Market. — West Australians steady. — Diamond shares strong.

CONSISTENT firmness and unimportant fluctuations characterised the Mining Market for the better half of the current week, but during the last day or two a distinctly harder tendency has developed in the South African Market, with the result that the quotation list to-night shows a general improvement as compared with a week ago. A more confident feeling exists as to the future of the Transvaal. Mr. Rhodes is in England, Sphinx-like in his reticence. The prisoners of the Reform Committee are on their trial in Pretoria, and Dr. Jameson is on the way to his trial here. Mr. J. Hays Hammond, the representative of the Consolidated Gold Fields, has been released on bail, and altogether it looks as though a satisfactory settlement of the present difficulties were within measurable distance. The bears, who were content to lie low so long as hope existed of fresh disturbance, are now beginning to show signs of fidgeting. Reading between the lines in the inspired articles of the wire-pullers' organs published on the other side, one can arrive at the conjecture that the shrewdest of the Johannesburg Financing clique have closed their operations for the fall, and are now prepared to assist in a rally. The inevitable falling off in the crushing returns from the Rand for January, may yet help them in picking up shares at lower prices than would be possible had there been no temporary check to mining operations. But after all, this drawback is soon disposed of and its causes are so thoroughly understood by everybody as to have been fully discounted already. The general public on this side do not appear to have been doing much business in the Mining Market for the past two or three weeks, but that they are not far off, may be surmised from the fact that Consols have established a fresh record this week, and that the Railway Markets have been more active than for many months.

Saturday was a featureless day, movements in Africans being few and unimportant. There was not much doing in West Australians, but on the whole a hardening tendency was manifest. Indians were distinctly better, and New Zealand and copper shares inclined to improve. On Monday there was a little spurt in Kaffirs in anticipation of Mr. Rhodes's arrival, Chartered and Gold Fields leading the way. There was a set back, however, before the close on profit taking. West Australians were in better demand, whilst New Zealand shares and Indians relapsed slightly. On Tuesday Gold Fields led the way with a smart advance, and Chartered were slightly better, but the chief gain was in De Beers, which had a big rise. Business was dull in the West Australian market. There was a fair amount of business in Indians, and the tone in the Miscellaneous market generally was goodish. The dividend announcement of the South African Gold Trust was made on Wednesday. Africans generally were steady, but gold shares did not make further progress in the upward direction. De Beers were good again. West Australians were good, under the lead of Great Boulders, and a fair business was done in Miscellaneous without appreciable change. On Thursday the jobbers were busy for half-an-hour or so in the morning, but when the first demand was satisfied there was little support to prices, operators intimating that they preferred to wait for the new account, dealings for which will commence on Monday. The pronounced improvement in prices to-day goes to confirm the opinion which we have expressed that there are still a good many bear accounts to be closed. Kaffir prices have steadily improved throughout the day, and the closing is at the best. We should be afraid to follow this advance too far in the present uncertain state of affairs. At the same time the bears would seem to be wise in curtailing their commitments.

South Africans.

We referred last week to the prevalent "tip" that Chartered shares were likely to improve upon Mr. Rhodes's arrival in this country. The result proves that for once in a way the general "tip" was founded on reliable information. Whether or not Mr. Rhodes himself has had a hand in bringing about this movement, it is not for us to suggest. The market takes a favourable view of the proposed Railway extensions, which are accepted as indicating progress. A growing activity in the shares was manifest in the earlier part of the week, but it was not until to-day that the rise assumed considerable proportions. The closing price on Thursday was 3½. It the Street to-night the shares are in strong demand at 4½, a gain of nearly 1 on balance. Consolidated Goldfields are 1½ better at 11½, Goldfields Deep have risen 1½ to 8½, and Gold Trust ½ to 8½. The dividend announcement at the rate of 15s. per share, with about £275,000 forward, was fully up to expectations under the special circumstances, but it had no immediate effect upon the price of the shares on Wednesday. The odd fraction of the quotation has been scored to-day. Another very active market has been East Rands, which close 1½ up at 6½. Comets have put on ½ at 2½, and St. Angelo ½ at 3½. The allied Anglo-French Explorations have improved ½ to 4½. Rand Mines

are 2½ higher at 27, and other Deep Levels are better, notably Goldenhuis Deep ½ up at 6½. The Barnato Stocks have been firm without sensational movement. The chief gain is shown in Buffelsdoorn, ½ higher at 3½. Barnato Banks have risen ½ to 1½, Barnato Consols ½ to 2½, George Goch ½ to 2½, Glencairn ½ to 3½, Johannesburg Investment ½ to 3½, Langlaagte Royal ½ to 1½, May Consolidated ½ to 3½, and New Primrose ½ to 6½. Considerable strength has been displayed by the leading Robinson stock, especially Randfontein, which close ½ up at 3, Langlaagte Estate have put on ½ at 6½, and Blook B are ½ to the good at 2, but Robinson Banks are unchanged at 6, after standing at 5½ on Thursday. The improvement in Gold Fields has encouraged purchases of Simmer and Jack which are 2½ up at 20. Modders have put on 1½ at 10, Jubilee ½ at 9½, Goldenhuis ½ at 4½, City and Suburban ½ at 5½, Ferreira ½ at 17½, Jumpers ½ at 7½, and Wemmers ½ at 11. Knights are ½ better at 6½, a price which shows a fair profit to allottees of the new shares. Luipaard's Vlei are ½ better at 1½, on the reconstruction scheme. Bantjes have risen ½ to 2½, Meyer and Charlton ½ to 5½, Kleinfontein ½ to 3½, Orion ½ to 3, Sheba ½ to 1½, Robinson ½ to 9½, Village Main Reef ½ to 6, and Transvaal Gold ½ to 5½. The Van Ryn group has been supported quietly, the parent shares standing ½ higher at 5½, with Wests ½ up at 3½. Coetzestrooms have been taken in hand by a clique, and show again of 2s. 6d. at 7s. 6d. Klerksdorp have been active, but close without important alteration at 15s. 9d. Hendersons have risen ½ to 2½, Tati Concessions ½ to 1½, New Africans ½ to 3½, Bechuanaalands ½, and Oceana ½, both to 1½, and Mozambique ½ to 1½. While many other shares show no improvement on last week's prices, it is difficult to find a single instance of decline. The Spitzkop report, issued on Wednesday should encourage holders to stick to their shares. The price is unchanged at 15s. Lydenburg Estates are ½ better at 1½, but the smaller Lydenburg shares have been neglected. Diamond shares have been extremely active. The report of the recent De Beers meeting at Kimberly gave a fillip to those shares on Tuesday, when there was a rise of over £1, carrying the price to 25½. On Wednesday they changed hands over 2s, and the last price is at that figure, marking a gain of 1½ on the week. Jagers have improved in sympathy, closing ½ better at 9½. The St. Augustine Company published a statement on Tuesday that by June next the mine should be earning 20 per cent. on its capital. The shares are 1s. 9d. higher at 14s. 9d., or nearly double the price at which they stood in the middle of January.

West Australians.

The changes in West Australians are few and unimportant. Great Boulders were dull on Saturday, opening at 5½ sellers, but they closed better on the report that a fine body of water had been struck. On Monday they were bid up to 5½ on a return of 1222 ounces showing 5 ounces to the ton. On Wednesday a cable was received stating that the claim for a portion of the property had been withdrawn, and that the Jumpers had paid costs. On this the shares changed hands at £8. On Thursday there was a relapse to 5½ on profit taking, and the last price 5½ shows a gain of ½ on the week. Hannan's Brownhills are ½ up at 6½, and amongst other Hannan's properties that have scored advances are Oceana ½ up at 1, and Proprietary ½ better at 1 premium. Hannan's North at 1½, Hannan's Reward at 3½, Napier at 1½, and True Blue at 1½, are all firm at previous quotations. Associated have been a very firm market, and mark a gain of ½ at 1½. Hampton Plains have been in good demand, but close unchanged at 4½. Lady Loch at 2½, Lady Shenton at 2½, Mainland Consols at 3½, Paddington Consols at 1½, Kintore at 1½, and Wealth of Nations at 1½, are all the turn better. Special strength has been shown in Ejudina, which are ½ better at 1½. A like gain is shown in Black Flag at 1½. West Australian Mining have commanded a good deal of attention, and close better at 9s. 3d. Sherlaw's Gold are steady at 13s., and a renewal of interest has carried up Mines and Banking and Westralia (Limited) ½ each to 1 and 1½ respectively. West Australian Gold Field are unchanged at 6½. Colonial Finance has put on ½ at 5½, after touching 5½, and London and Globe is a shade better at 2½; but the Finance and Exploration Group, as a rule, shows no quotable change. Amongst the few adverse changes may be noted a fall of nearly 10s. in Mawson's Reward at ½. The Monzie's Group has been well supported, Reefs scoring ½ at 1½, and Consols and Mining and Exploring ½ at 1 and 1½ respectively.

Miscellaneous.

The Indian Gold Group has continued in favour, the satisfactory mining returns for January having a good effect. The Mysore yield was 6349 ounces, the Nundydroog 3323 ounces, and the Ooregum 6180 ounces. Mysore have put on ½ at 4½, and small gains are shown in Nundydroog at 2½, and Ooregum at 2½, but Champion Reefs are unchanged at 5½. The New Zealand group has been active. Hauraki are 2s. 9d. better at 11s. 3d. in connection with the prospectus of another bigish company. Waihi, after a dip, are only ½ down at 5½, whilst Silvertons at 3½ and Waitakauri at 3½ are without change. There have been fluctuations in the copper market which leave most of the shares higher with the exception of Rio Tintos which are finally unchanged at 17½, after touching 17½, and going over 18. Anacondas are commanding increased attention, and close ½ higher at 6½. Capes at 2½, Copiapo at 2½, Libiola 3, Mason and Barry at 2½, and Tharsis at 5½, are all ½ to ½ better. Another splendid return from the Brilliant Mines, showing over 1 ounce to the ton from 3000 tons, leaves the shares unchanged at 15s., Day Dawns are firm at 10s., Wentworths at 1½ and Aladdins at 1½, are both ½ better. The threatened boom in Cripple Creeks is still in abeyance. Alaskas are unchanged, Mexicans at 1½, and Treadwell at 5½. Burma Rubys have put on 2s. 6d. at ½ and Broken Hills are from £3, which is last week's price.

STOCK EXCHANGE SETTLING DAYS.

Settling Days on the Stock Exchange are as follows:—

CONSOLS.	
Monday, February 3.	Monday, March 2.
STOCKS AND SHARES.	
FEBRUARY.	
Wednesday, February 12	Thursday, February 13
Wednesday, February 26	Thursday, February 27
Contango Days for Mining Market:—	
Monday, February 10	Monday, February 24

SPECIMENS of the quartz of the Easter Gift Proprietary Gold Mines, which are situated in the Hannan's district of Western Australia, are amongst the notable exhibits at the Royal Aquarium this week. We understand that the prospectus of this company will be issued to the public in the course of the next few weeks.

We are informed that in consequence of Mr. Middleton's book on "Gold Mining" having been largely applied for, a further issue has been printed, and can be obtained, price 1s., at the office, Broad-street House, E.C.

SIDE LIGHTS ON THE LAW.

Legal Jottings on Cases in the Courts, and on Questions affecting Mining, Railway, Financial, Industrial, and allied Interests.

BY A BARRISTER.

THE Lord Chief Justice announced on Thursday that the Lord Justices will come next week from the Court of Appeal to the rescue of the Queen's Bench Division, where the common law business has been getting into arrears ever since the end of the long vacation. The result will be that further attack will be made upon special jury cases. The Press were asked to take notice of the announcement. Last sittings, after allowing matters to sleep for weeks, cases were, on the return of some of the judges from circuit, suddenly put in the list for trial without previous notice, notwithstanding it had been announced that they would not be proceeded with in the course of the sittings. This notice indicates that more attention is to be given to the convenience of the profession and the public, and if the Chief Justice is going to take notice of the way the lists are made up and announced, both will have cause to be thankful.

It has often been argued that a person's right to recover back money paid for a forged bill of exchange depends on whether the person who pays has been guilty of negligence. This view seems to have been based on an expression of Lord Mansfield's that an acceptor of a bill of exchange must be supposed to know the handwriting of the drawer. Mr. Justice Mathew has exploded this idea. To say that a person cannot recover the money because he has negligently paid on a forged indorsement is tantamount to saying that if the forgery is a clever one he may have the money back, whereas if it is a clumsy one he cannot. Such a view is, to the commercial judge, absurd. The real and true principle is, according to him, that if the acceptor so conducted himself as to lead the holder of the bill to believe that he considered the signature genuine, he could not afterwards withdraw from that position. This seems sound sense, and the commercial judge has done a service in pointing out that the true principle is that, in the interest of commerce, the holder is entitled to know at once whether or not the bill is going to be met. The result is, therefore, if at once the acceptor who has paid the bill finds out the mistake, the money may be recovered back. But if he does not, and any interval of time has been all waded to go by, and the money was paid for the bill in good faith, and received in good faith, the money cannot be recovered back. Such a rule is, says the judge, indispensable for business, since the holder of a bill cannot fail to have his position affected, if any interval of time elapses during which he holds or spends the money as his own.

THE expression "as and when and in like manner" in contracts for the payment of commission has become so universal an expression between business men that it would be a considerable calamity were the Courts to put upon it any other interpretation than that in which it has been generally used and intended in commercial circles. A case just decided by the Court of Appeal, which arose out of a contemplated Chinese loan of £10,000,000, which proved abortive, is of no small importance. The plaintiff, Mr. Malcolm, who had some interest with the Chinese Government, was authorised to place the loans, and had some conversations with Messrs. Armstrong and Co., who gave him a letter or commission note, undertaking "in consideration of your introducing the loan to us, and our securing the same through you, and for services rendered by you, we hereby agree and undertake to pay you a commission of £21,127. The same to be payable to you as and when and in like manner we receive our profit. In the event of our not carrying the business through, then you are to have no claim against us of any kind." Messrs. Armstrong, in consequence, got the contract for the loan from the Chinese Government, but never put it before the public, owing, as they said, to the Government having made its success impossible. Mr. Malcolm then claimed that he was entitled to be paid, having done everything on his part, and that Messrs. Armstrong were not entitled to do anything to prevent him from earning his commission; and in an action brought for his commission he wished to give evidence to show that there were other terms of the contract which took place in conversation, but which were not contained in the commission note. The judge, at the trial, refused such evidence, holding that the parties were bound by what was reduced to writing, and the plaintiff appealed. The Master of the Rolls, in giving judgment, said that verbal negotiations had taken place, and next day the defendants gave a commission note, which contained their view of the contract, and the plaintiff took and kept it. The plaintiff accepted that contract. The law, he added, is clear that evidence of conversations cannot be given to alter a written contract. Moreover, the contract cannot be rectified unless it was proved that both sides made a mistake, and intended the contract to be something different from that which was written; and there was no evidence of a mutual mistake. As to the contention that a term ought to be implied that the defendants would not do anything to prevent the commission being earned that could not be implied unless it appeared that both sides must have intended it. In the face of the express terms that the commission was to be paid "as and when," and "in the event of our not carrying out" there was to be "no claim" against Messrs. Armstrong, it was impossible to imply such a term.

THE difficulty of laying down an intelligible principle to govern the affairs of ordinary human existence is everlastingly triumphing over the minds of lawyers. To help them in deciding what damages a person who does an injury, or commits a breach of a contract, may be held liable to pay, the fixed rule has long since been laid down that there is no liability for damages which are "remote" from the injury. But though the rule is fixed, it is not always intelligible when it has to be applied. In the great majority of cases no doubt the problem is solved by asking oneself the question—"Is the particular result such as might have been contemplated by the parties, as naturally flowing from the act done?" Thus, if you wrongfully give a person in the public street in custody of a policeman, and he is detained and locked up, besides the injury done to his reputation by the manner in which the charge has been preferred, he will be entitled, in the way of damages, to all the costs he may be put to in and about obtaining his release from a false or improper charge. But if the magistrate remands the detained man you will not be liable for this further detention, since that is the act of the justice. A good illustration of the difficulty of applying the rule as to remoteness of damage occurred the other day in a case in which the owner of a field took in horses to graze, and amongst others he took in the plaintiff's mare. Beyond the field was a cricket field. A wire fence separated the two fields, which communicated by a gate. One day the servant of the owner of the

ABBREVIATIONS AND REFERENCES.—The following are the significations of the abbreviations and references, which occur in the Share List:—*A*, Antimony; *As*, Arsenic; *Bl*, Blende; *Bz*, Borax; *C*, Copper; *D*, Diamond; *G*, Gold; *Ir*, Iridium; *A. L.*, Lead; *M*, Manganese; *N*, Nitrates; *P*, Phosphates; *Q*, Quicksilver; *R*, Ruby; *S*, Silver; *S-P*, Silver-lead; *Sul*, Sulphur; *T*, Tin; and *Z*, Zinc. In the "Amount of Shares" column of the British Mines and Quarries, the "Amount of Shares" signifies that the mine is conducted on "Cost Book" principles; 1 in the "Head Office" column of African Mines signifies that the address given is not that of the head office, but of a sub, or transfer office; and 1, following the name of African Mines, signifies that they are subject to the Limited Liability Law of the South African Republic.

The following is by far the most complete and comprehensive list of mines, in whose shares business is being currently transacted, published. Additions will be made from time to time as occasion requires. Every effort is made to ensure accuracy, and Secretaries of Companies, Share Dealers, and our readers generally, are cordially invited to co-operate with us to this end, by notifying us of any errors that may at any time occur. We desire it to be understood that, while our Share List will almost invariably be found correct, we do not hold ourselves responsible for any loss or inconvenience that may arise from possible inaccuracies.

AFRICAN MINES—(Continued)

Name.	Closing Price, Feb. 7, 1895.	Closing Price, Jan. 31, 1895.	Am't. of Share	When last Paid Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
Nigel	4 1/4	4 1/4	1 0	Aug 10 '95	1 0 0	160,000	Hand	96, Gresham Ho., E.O.
" Deep	2 3/4	1 1/2	1 0	—	1 0 0	195,000	Heidelberg	5, Old Jewry.
North Randfontein	1 1/4	1 1/4	1 0	—	1 0 0	235,000	—	5, Princes street
Nourse Deep	4 4 1/4	4 4 1/4	1 0	—	1 0 0	375,000	Hand	120, Bishopsgt.-st., W.
Oceana	1 1/4	1 1/4	1 0	2/- Nov. 23 '95	1 0 0	357,400	Wetberg Lyn	13, Austin Friars,
" Development	3/4	3/4	1 0	—	1 0 0	50,000	Heidelberg.	—
" M. Merai	3/4	3/4	1 0	—	1 0 0	5 0 0 1/2	—	—
Orange F.S.E.	2 1/2	2 1/2	1 0	10 1/2 Aug., '95	1 0 0	234,000	Orange F.S.	10, Moorgate-street,
Orion (New)	2 3/4	2 3/4	1 0	10 1/2 Aug., '95	1 0 0	30,000	Hand	8, Old Jewry.
Parli Central ...	1 1/2	1 1/2	1 0	—	1 0 0	138,750	Transvaal	120, Bishopsgt.-st., W.
Pardy's Mozamb	1 1/2	1 1/2	10/	3/- Jy 11 '95	0 10 0	13,000	S.E. Africa	Broad St. Avenue.
Piggs Peak ...	3/4	3/4	1 0	—	0 17 6	200,000	Swaziland.	6, Queen-street-pas
" Peak ...	—	—	1 2	—	1 0 0	60,652	—	—
Porges Randfont.	1 1/2	1 1/2	1 0	10 1/2 Jan '96	1 0 0	—	Potochefstam	19, Bury-st., E.O.
Potochefstam ...	3/4	3/4	1 0	—	1 0 0	389,750	Hand	33, Cornhill, E.O.
Princess Estate G	3 1/2	3 1/2	1 0	—	1 0 0	25,000	—	—
Rand Central Ore	2 1/2	2 1/2	1 0	25 p.c Aug. '95	1 0 0	115,000	—	5, Princes-street, E.O.
Randfontein ...	2 1/2	2 1/2	1 0	—	1 0 0	2,000,000	Hand	59, Holborn Viaduct
Rand Mines ...	2 1/2	2 1/2	1 0	—	1 0 0	332,78	—	120, Bishopsgt.-st., W.
Rand-Rhodesia Ex	1 1/2	1 1/2	1 0	10 p.c. Oct., '95	1 0 0	25,000	Rhodesia	123,
Read's Drift	2 1/2	2 1/2	1 0	—	1 0 0	37,000	Transvaal	19, Finsbury circuit
Rhodesia Ex & Ev.	5 1/2	5 1/2	1 0	—	1 0 0	80,000	Mt. & Mash	8, Old Jewry.
Robinson (S.A.) Bank	5 1/2	5 1/2	1 0	—	4 0 0	750,000	—	5, Prince-street
" Deep	3 7	6 7	1 0	—	1 0 0	500,000	W. R. Rand	12, Bishopsgt.-st.,
" Diamond	1 1/2	1 1/2	1 0	—	1 0 0	330,000	Kaai Valley	8, Prince-street
" Gold	1 1/2	1 1/2	5 0	6/- Jy 26 '95	1 0 0	550,000	M. R. Rand	25, Austin Friars, E.O.
" Randfont.	2 1/2	2 1/2	1 0	—	1 0 0	177,000	Hand	5, Prince-street
Rondepoort Deep	5 1/2	5 1/2	1 0	5/ Aug 14 '95	1 0 0	170,000	—	8, Old Jewry, E.O.
Rondepoort Un. G	4 4 1/4	4 4 1/4	1 0	—	1 0 0	130,000	—	Wardford-court,
Rose Deep	—	—	1 0	—	1 0 0	300,000	M. R. Rand	30-31, S. Switlin's-lane,
Rosenblock Tw R's	1/4	1/4	1 0	—	1 0 0	60,000	Krugeradp	4, Tokenhouse-bldg
Rothery Block	1/4	1/4	1 0	—	1 0 0	—	—	55, Bishopsgt.-st.,
St. Angelo	3 1/2	3 1/2	1 0	—	1 0 0	175,000	—	Winchester House,
Salisbury New ...	3 1/2	3 1/2	1 0	—	1 0 0	99,000	Hand	95, Gresham Ho., E.O.
Sheba	1 1/2	1 1/2	1 0	1/- Sep 28 '94	1 0 0	850,000	Lydenburg	18, S. Helen's-pas.
Shiki	1 1/2	1 1/2	1 0	—	0 18 6	119,000	Zoutpan'g	85, Gracechurch St.
Simmer & Jack	4 1/2	4 1/2	1 0	2/ Aug 14 '95	1 0 0	250,000	Hand	8, Old Jewry.
S. A. Gold Trust New	4 1/2	4 1/2	1 0	5/ Jun 12 '95	1 0 0	250,000	S. Africa	—
South West Rand	3 1/2	3 1/2	1 0	—	1 0 0	158,000	Hand	Winchester House,
Spitzkop (New) G	3 1/2	3 1/2	1 0	—	1 0 0	99,070	Lydenburg	15, Bishopsgt.-st., W.
Stanhope	1 1/2	1 1/2	1 0	2/- Oct 20 '95	1 0 0	34,000	Transvaal	36, Gresham Ho., E.O.
Sutherland R.	6/ 7	6/ 7	1 0	—	1 0 0	220,000	Zoutpan'g	Dashwood Ho.
Tati Concessions ...	1 1/2	1 1/2	1 0	rtz Jy 22 '95	0 5 0	392,000	Barberton.	Gresham House.
Thistle Reef	1 1/2	1 1/2	1 0</					

EUROPEAN MINES

AUSTRALIAN AND NEW ZEALAND MINES—(Continued).

NORTH AMERICAN MINES.SOUTH AND CENTRAL AMERICAN MINESINDIAN AND ASIATIC MINES.

Belaghat Mysore G	2/6	3/	2/6	3/-	1	0	—	0 19 C	159,945	India	6-7, Queen-street-pl
Burma Ruby.....R	3/6	7/4	9/4	13/4	1	0	—	0 18 0	230,551	Burmah...	Suffolk House N O.
Champion Reef...G	513/10	513/6	513/10	513/4	1	0	s/- Jan. 16 '98	1 0 0	220,000	India	6-7, Queen-street-pl.
Cotiar Central ....G	1/	1/6	1/	1/-	1	0	—	1 0 0	200,800	"	Dashwood Ho., E.O.
Coromandel.....G	13/10	13/10	13/10	13/4	1	0	—	0 17 8	95,000	"	6-7, Queen-st. place
GoldPidsMysoreG	30/-	21/	21/	22/	1	0	2/- Feb '98	1 0 0	275,000	"	6-7, Queen-street-pl
Kadur Mysore.....G	4/	5/	5/	5/	—	—	—	0 5 0	400,000	"	Copthall House, E.O
Kempinkote G&F	2/	0/0	2/	3/6	0	0	—	0 8 0	750,000	India	6-7, Queen-st. place.
Mysore	413/4	413/4	313/	313/	1	0	2/6 Oct. 30 '96	1 0 0	248,354	"	6-7, Queen-street pl.
My. Harballi ....G	1/	1/6	1/	1/6	1	0	—	0 10 0	100,007	"	2, East India Avenue
" Roofs	5/	9/	0/6	0/5	1	0	—	1 0 0	160,000	"	6-7, Queen-street-pl.
" West(N)G	113/4	113/4	913/	913/	1	0	rts. Jan. 16 '98	0 19 0	127,402	"	1, St. Winchombe St.
" Wynaad	1	13/4	1	13/4	—	—	rts. Jan. 16 '98	0 19 0	125,000	"	"
Nine Roofs	1/3	2/3	1/3	2/3	—	—	—	0 10 0	250,000	"	6-7, Queen-street-pl.
Nandydrood.....G	213/4	213/4	213/4	213/4	1	0	1/6 Nov 14 '95	0 10 0	200,000	"	"
Ooregand	213/4	213/4	313/4	313/4	1	0	1/- Dec. 18 '95	1 0 0	145,000	"	"
" (10 1/2 Prof.) ..	313/4	313/4	313/4	313/4	1	0	1/- Dec. 18 '95	1 0 0	107,011	"	"
" (10 1/2 Prof.) ..	3	313/4	3	313/4	1	0	3/- Dec. 18 '95	0 5 0	12,309	"	"
Pauang Asabang T	1/4	3/4	1/4	3/4	1	0	—	1 0 0	200,000	Malay Fn.	4s, Jeffrey's st. E.O.
Yerrakonda .....G	/8	1/8	/8	1/8	4/	—	—	1 2 8	187,491	Mysore ..	6-7, Queen-street; pl.

A WESTERN AUSTRALIAN DINNER.

ON Thursday evening a dinner was held at the Holborn Restaurant to meet and bid farewell to Mr. Frank Nicolas, F.R.G.S., mining engineer, of Coolgardie, who, after a short visit to the Mother Country, is about to return to Western Australia to continue his operations in the gold fields. The Honourable HOWARD STREXLEY presided over a large gathering of those interested in the colony's development.

The Royal toasts having been duly honoured,

The CHAIRMAN, in giving the toast of "The Guest of the Evening," said they had come there that night to say "Good-bye" to a gentleman who was a very esteemed friend to many of them, and he trusted that in the future he would be a friend to the whole of the mining community. Their guest that night would on the ensuing evening start on his way to Coolgardie, West Australia; but at no distant date he hoped to return home, bringing with him good news of the health and prosperity of those connected with him in that mining colony. Mr. Nicolas, who was a gentleman of repute, and was held in high esteem as a mining engineer, was some years ago one of the original managers of what, perhaps, was one of the largest mines in Victoria. After being in Victoria for some time, he went to India, where he conducted mining operations. Proceeding to the Straits Settlements, he again associated himself with mining, and from thence he went to South America, where he encountered the difficulties incidental to insufficient railway communication. He very quickly got away from there, and ultimately found himself in West Australia. Such was the record of the man whom they had met that night to honour, and he trusted that they would join with him in drinking health, wealth, and prosperity to their guest. Mr. Nicolas, no doubt, would tell them something in connection with mining operations throughout the world; he would tell them what was being done at the present moment in West Australia. He had been astonished to hear that during the last 40 years Victoria had exported more than 1 ton of gold per week to this country, and of that quantity Bendigo alone had sent a large proportion. Knowing this, they could conceive what in the future they would get from West Australia. Under the able direction of their friend and other experts he anticipated in the near future a very large increase in the output of gold from that colony. He called upon them to drink health and prosperity to their friend.

The toast was drunk with all the honours.

Mr. NICOLAS, in acknowledging the compliment, said there was still a very great misconception in regard to the permanency of the gold fields in West Australia, and an even greater misconception in regard to the way in which the mines were worked. It was stated that the Coolgardie gold field was only a temporary gold field; that it had been grossly overrated; that when good returns had been shown the ore had been carefully picked, or that it had even been heavily salted; that the gold was not permanent because it ran only in surface pockets, and that the reefs were not permanent because they did not hold in depth. There was also a second-class of investors who grudgingly recognised the proved wealth of the Coolgardie gold field, but who threw doubts upon its payable capabilities. To both these classes he replied that if they had been in Coolgardie, and had seen what he and others had, they would not hesitate to confirm his opinion that Coolgardie was not only a proved gold field, but a gold field proved payable. (Applause.) Wherever they went they found hundreds of men putting their little all into the work, and expecting to get large returns. Already, too many excellent results had been produced, although many were not known in England, because some of the best mines were owned by their foreign contemporaries—one of these had returned 17 ounces to the ton. But three other points of difficulty raised by the pessimist were those of health, water, and labour. The first point he dismissed as groundless, while in regard to labour, his experience was that there was plenty. It was all nonsense to talk about the want of water. When Coolgardie was first discovered there was a great scarcity of fresh water, and in some parts where there were no condensers there was still a great scarcity, but where systematically looked for water had been found, as was proved in the cases where the Government had sent their engineers. But this question of salt water was a small matter, because where there was salt water it was very easy to condense it, and the real question was, Is there sufficient salt water for milling, and is it suitable for milling? Undoubtedly, there was a very large supply, but the amount varied according to the district. In some districts, notably the 21-mile and Black Flag, he assured them that the difficulty was to get rid of the water, and he had been twice prevented from examining reefs in this district owing to the amount of water in the shafts. The water was salt, but it could be used just as it was for milling purposes. Again, people imagined that they had no rainfall. On the contrary, they had a very heavy one. But, they asked, "Then why this scarcity?" The answer was simple. Although there was plenty of catchment area, no attempt had been made by private companies to conserve the water, and very few by the Government, but what attempts had been made by the Government had been entirely successful. All along the Southern Cross road there were good tanks, also in Coolgardie itself, at the White Feather and Menzies. In fact, wherever the Government had put tanks they had been easily filled, and had in every instance afforded good holding ground. But, as a matter of fact, the Government engineer calculates that enough water could be got from the catchment area supplied by the hills on the 90-mile district at 1s. per 100 gallons; £200,000 was a large amount to spend unless they could see their way clearly, and it was very evident that the Government did see their way clearly, or they would never have voted such an enormous sum. Before the Government there were three schemes. The catchment scheme was one; the pumping water from the lakes to the top of Mount Burgess, another; and the third, the pumping of water from the Swan river to the same place. Each of these schemes was possible, and the only question was which would pay best. Concluding, he said it was really only those in London who said anything against the mines—one engineer had also done so, but since he had been out in West Australia again he had been so convinced that he was now one of the staunchest believers in the permanency of the gold fields. (Applause.)

Mr. J. W. BEVAN proposed "The Mining Industry," remarking that he considered they owed a debt of gratitude to those men who left their families at home and were engaged at the numerous mines all over the world. He was pleased to see that, while for the moment there was a dark cloud passing over the Transvaal, still, on the other hand, progress was being made in Australia. (Applause.)

Mr. F. C. POISSON, in replying, considered that the industry was in a most prosperous condition. At the present time there was the brightest prospect for the West Australian mines, and it rested very largely with Mr. Nicolas, as well as others, to prove that this really was the greatest mining industry in the world.

Other toasts having been honoured, the company separated.

PARIS LETTER.

(FROM OUR OWN CORRESPONDENT.)

French companies in South Africa.—Investors in Rand mines and their interests.—Recovery in gold mining shares.—Gold in Belgium.

THE increasing interest shown by French capitalists in auriferous mining in the Transvaal continues to be the principal feature of the financial position. Contrary to what might have been expected, the late crisis has had no effect in influencing capitalists against South African undertakings, but has rather stimulated their enthusiasm in the hope that the exposure of abuses will lead to an early suppression of monopolies and other reforms which are necessary to the welfare of the industry. In this respect the French are fully supporting those who are insisting upon an equitable treatment of the foreign population, and it is firmly believed that the mines will soon be worked under conditions much more advantageous to the shareholders than they are at present. At the same time, it is held that the abortive invasion will still further strengthen the independence of the South African Republic as a field for international investment and enterprise. In view of this more encouraging outlook capitalists, engineers, and prospectors are visiting the Transvaal in considerable numbers, some to establish agencies of financial syndicates in Johannesburg, and others to investigate the position of the companies in which so much French capital is placed, while numerous prospectors are now engaged in seeking likely claims in the Transvaal and Rhodesia. This latter territory is coming in for more and more attention as a possible field for profitable enterprise, and mining engineers, who have found that there is little fresh scope for operations in the Transvaal, are hoping to secure better fortune in the possessions of the Chartered Company. Already a few options of claims have been secured by French companies in Rhodesia and the adjoining territories, and if they prove to be worth developing there is certain to be a great deal of activity in company promotion in this country. There is, indeed, abundant promise that the ensuing few months will see a considerable amount of French capital going into purely native concerns for the exploitation of the South African gold deposits.

There is a growing impression, however, that the small capitalist cannot pursue an intelligent policy of investment unless he is rendered entirely independent of the intervention of intermediaries in London. Until quite lately most of the business had to be transacted through London, and no information on matters affecting South African mining could be obtained except from English sources. This necessarily entailed a vast amount of inconvenience, which was particularly noticeable in the non-delivery of certificates, and at the present moment there are comparatively few holders in possession of their scrip, though it was paid for six months ago and more. Now that the interests of French investors in the Transvaal are so enormous, amounting to two-thirds of the holdings in certain companies, it is urged that the time has come when they should be put upon an independent footing, and when they should have some control over the concerns in which they are chiefly interested. The immediate result of this movement has been to transfer nearly the whole of the business formerly transacted through London agencies to the French financial syndicates, and these are now occupying an extremely important position in Paris, both with respect to the magnitude of their operations and the profitable character of the business they undertake. The Banque Française de l'Afrique du Sud is, of course, taking a leading part in assisting the French investor, and it has been successful in obtaining the delivery of a great many certificates that would probably still be withheld if it had not been for its intervention. At the forthcoming meetings of the Rand companies the French shareholders will be represented by the syndicates, which have in this way inspired a feeling of confidence that cannot fail to favourably influence the Mining Market.

The dealings in South African scrip, which have up till lately been carried out with extreme reserve, are now becoming much more active, and there is every prospect of a smart recovery taking place all round. For some time past the Paris market has been resisting the bearing movement with a good deal of success, and values have sustained scarcely any fluctuations, while those on the foreign exchanges were exceedingly weak. The explanation of this is seen in the growing impression that the gold resources of the Transvaal constitute the best guarantee of profitable returns in the future. As that country is monopolising the attention of investors at the present moment, and there is very little prospect of any other market coming forward with equal claims, they are prepared to make the most of their holdings in South African companies. At the same time, these holdings are so considerable that investors have not thought it expedient to increase them to any large extent, and the market, therefore, has for a long while past been very quiet, though capable of responding to an upward movement on the Stock Exchange at the favourable moment. This is now what is taking place, for the few purchases being made on London account have resulted in the quoting up of all the leading values, and buyers are showing more readiness to take up scrip in anticipation of a further advance. East Rand have for some days past been a strong tip, and this preference is justified by the price at which they now stand, representing an advance of about 15 francs on the week. Gold Fields have been fluctuating for several weeks, but they are being bought up at the highest figure touched since the beginning of the year. Ferreira, Simmer and Jacks, Robinson Mines, Randfontein, and other of the leading shares are in better call, and it is fully expected that these values will continue to advance slowly for some time to come. It is certain, however, that in view of the caution that continues to be displayed in the purchase of South African shares the prices will not be allowed to inflate to a level beyond what is honestly believed to be their real value. It is quite possible, of course, that speculators who made a pile out of the gambling craze last year will be tempted to challenge fortune again, but they can hardly have much success while the great body of investors hold on to their shares and refuse to be frightened into realising at an inopportune moment. Indeed, the strength of the Paris market lies in the fact that nothing but the most reputable concerns are securing any support, and in future the value of the scrip will be regulated strictly by its dividend-paying value.

While gold is being discovered in so many unlikely places throughout the world, it is not, perhaps, surprising that certain quantities of the precious metal should be found in Belgium, near the German frontier. In the neighbourhood of the Ardennes, Eiffel, and Fagnes there exists a considerable number of tumuli, which have generally been looked upon as the remains of prehistoric tombs, though nothing has been discovered to give colour to this theory. Lately an engineer had the curiosity to analyse some of the stones forming the tumuli, and he found that they contained a little lead and a certain quantity of gold. Some miners were employed to wash the

débris, when a fair amount of precious metal was recovered. After further pursuing these investigations, there remained little doubt that the tumuli were the ruins of workings carried out by the Romans, and it was even possible to get some idea of the way in which the mining operations were conducted. Several veins of gold have been traced in the district, though it is not believed that they are sufficiently rich to pay for the working. The discovery, however, has a great historical interest as showing that the gold mining industry in Western Europe, if not conducted upon any large scale, can yet lay claim to a very respectable antiquity.

INDIAN MINES' OUTPUT FOR JANUARY.

DURING last month the output of the producing mines in Mysore, India, was 22,442 ounces, showing a decrease of 210 ounces as compared with the preceding month, and an increase of 3084 ounces as compared with the corresponding month of 1894. The production since the beginning of 1891 has been as follows:—

	1892. Ozs.	1893. Ozs.	1894. Ozs.	1895. Ozs.	1896. Ozs.
January ...	11,674	16,844	17,026	19,672	22,442
February ...	11,780	16,656	15,803	19,358	—
March ...	11,579	17,463	16,080	20,257	—
April ...	11,813	18,287	15,551	20,399	—
May ...	12,488	17,922	16,543	20,797	—
June ...	11,847	16,879	15,459	20,839	—
July ...	13,277	16,676	18,271	19,280	—
August ...	14,554	16,692	19,073	20,704	—
September ...	5,529	17,060	18,911	21,502	—
October ...	15,922	17,440	19,119	22,301	—
November ...	15,942	17,557	18,825	22,545	—
December ...	16,435	17,659	19,068	22,652	—

Total ... 163,140 ... 207,135 ... 209,729 ... 250,306 ... —
The outputs of the individual mines for the past six months have been:—

	Aug. Ozs.	Sept. Ozs.	Oct. Ozs.	Nov. Ozs.	Dec. Ozs.	Jan. Ozs.
Ooregum ...	6,052	6,028	6,036	6,045	6,207	6,180
Mysore ...	4,844	5,563	5,699	6,029	6,123	6,349
Champion Reef ...	6,068	6,101	6,204	6,228	6,237	6,291
Nundydoo ...	3,267	3,286	3,295	3,315	3,321	3,323
Nine Reefs ...	64	—	—	—	110	—
Mysore Reefs ...	305	100	116	222	116	179
Mysore W. and	—	—	—	—	—	—
Wynad ...	—	424	951	706	538	—
Yerrakonda ...	104	—	—	—	—	—
Balaghat	—	—	—	—	—	120

CANADA AS A GOLD-PRODUCING DISTRICT.—The recent disturbances in South Africa have excited a marvellous amount of caution on the part of the investing public, and they have not unreasonably sought for some safer field for their capital. Science has done much in the Transvaal in overcoming difficulties in the working of ores that a few years ago (say) at the time of the Californian or Australian boom, would have been rejected as worthless, and turning them into a gigantic source of profit. Thus what are termed as low grade ores are now being worked at Dakota at something more than a nominal profit, and from recent discoveries in Canada, it is quite possible that British North America may become a fertile field as a gold-producing district.

THE WESTERN AUSTRALIAN DEVELOPMENT CORPORATION, Limited,

Will OFFER for SUBSCRIPTION, on WEDNESDAY, the 12th FEBRUARY, 1896, 46,000 SHARES of £1 Each in

THE ARMADALE GOLD MINING COMPANY, LIMITED.

CAPITAL - - - £100,000.

FULL PROSPECTUSES WILL BE ADVERTISED ON THE 12th INST.

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SOLICITORS.

Messrs. FRANCIS and JOHNSON, 20, Austin Friars, E.C.

BROKER.

WILLIAM G. WEAGER, 82, Old Broad Street, E.C.

REPORTS FROM THE MINES.

BRITISH MINES.

GREAT LAXEY.—February 5, F. Reddcliffe: The 295 west of Welsh shaft is now driven to within 5 or 6 fathoms of the crosscut at Dambell's shaft, so that boring should be effected at this point in about a month. The lode in the driving for the last 10 fathoms has been from 3 to 5 feet wide, containing much hard quartz, thickly spotted with ore in places, and the stuff worth saving. This is a slight improvement on the corresponding point in either of the two levels next above it. The 278 end north of Dambell's shaft is in very hard porphyritic rock, probably the dyke passed through in successive levels above, and is suspended at present, while a rise is being put up some distance behind the end by the same men and drill. The value of the rise is £12 per fathom. The rock in which the 255 end is being driven has been slowly, but distinctly, improving in character for some time past, but just at present there are bars of hard silicious rock in the end making progress somewhat slow. The various stopes, intermediate drivings, &c., throughout the mine, are of an average value of £10 per fathom.

LEADHILLS.—W. H. Paull, February 3: Brown's vein. In the 160 fathom level driving north of Jeffrey's shaft the vein has improved, now 4 feet wide, carrying a good mixture of spar and lead ore, worth 30 cwt. of ore per fathom. In the same level driving south of Wilson's shaft the vein is 4½ feet wide, containing strong spar with occasional spots of lead ore therein. The vein in the 85 fathom level south of Wilson's shaft continues rather soft and unproductive. The various stopes over the different levels on this vein continue to produce about same quantities of ore as reported on last week. Raik and highwork veins. The crosscut eastwards at the 100 fathom level is going forward regularly; ground a little easier, and forebreast still wet, but no other change. At the 100 fathom level driving south of crosscut Raik vein continues soft and unproductive, in same level north of crosscut the vein is now worth 20 cwt. of lead ore per fathom. Brown's vein. In driving westward from Brown's vein at the 100 fathom level the vein has become softer, and at present contains only small spots of lead ore. George's Roost vein. In Gripp's adit level driving north-west shows good stones of lead ore occasionally, but no further improvements there. All surface works are going on regularly, and weather favourable.

WEARDALE LEAD.—Report on Weardale Company's Mines for the week ending February 1: Groverake, Crosscutting to Greenclough vein north from Adamson's drift vein not yet out. 50 fathom level west in south part of vein holed into main level and now abandoned. 60 fathom level east sparry vein poor in ore, end worth 6 cwt. per fathom. Boltsburn. Stopes in north flats from Watt's level worth 40, 28, 20, 30, 18, and 8 cwt. per fathom. Stopes in south flats worth 16, 45, 8, and 18 cwt. per fathom. Vein stopes worth 23 and 30 cwt. per fathom. Greenlaw. Nattrass Gill drift drifting east in plate under quarry basal in part of vein, no ore to value. Watson's drift crosscut north the vein is divided, sparry part off, worth 12 cwt. per fathom. Race's drift vein still divided, drifting in the sparry vein, worth 16 cwt. per fathom. Stopes worth 14, 10 and 12 cwt. per fathom. Slaty basal drift, vein a little poorer, worth 14 cwt. per fathom. Lowe's drift strong, vein composed chiefly of spar, some ore, but none to value. Sedling. Driving 64 level east vein worth 16 cwt. per fathom. Stopes in 64 east worth 16, 14, 10, and 8 cwt. per fathom. Stopes above 64 level north branch of vein worth 14 and 16 cwt. per fathom. Ore raised for week 60 tons, ore dressed for week 90 tons; ore and slag smelted for week 27 tons, producing 49 tons of pig lead.

COLONIAL, INDIAN, AND FOREIGN MINES.

ALMADA AND TIRITO.—Report for the fortnight ending January 11: Guadalupe. The lode in the 150 feet level driving south of Taylor's shaft has fallen off in value during the past few days; its present yield is about 1 ton per fathom at 30 ounces silver per ton. It is mineralised 10 inches wide, but the lode is massive and stained throughout with oxide of iron. The drifage south on the Europas lode is mineralised 1 foot wide, but only yields about 1 ton per fathom at 20 ounces silver per ton. The lode in the 150 driving north of Taylor's shaft has a better appearance, and the walls are well defined. The black ore in the 150 feet drifage north of Wilde's shaft has almost entirely cut out, and a little green ore is now being broken. The lode in the drifage south from this shaft is slightly mineralised, and the ground is very hard. The tunnel driving south has a very encouraging appearance at present. The sinking of the No. 3 shaft has been suspended for the present, owing to the bad ventilation, and the men are cutting the 150 plat at Wilde's shaft. We shall commence to sink shaft immediately. We have to-day commenced to sink Taylor's shaft below the 150 feet level. Stopes. The yield from these has fallen off considerably. John Nute.

HARQUAHALA.—Mr. R. M. Raymond, the company's manager, has arrived at Kalgoolie (W.A.), and has taken possession on behalf of the company of its properties on the Hannan's field.

NEW QUEEN.—The following fortnightly report has been received from the mine, dated Charters Towers, December 21:—No. 4 south level (footwall). Stopping has been continued both over and under this level. The ground continues hard and bad for breaking, making it impossible to make as much progress as formerly. The reef varies from a leader to 8 inches, with portions of blank ground. No. 2 formation. Stopping has been carried on both sides of the wies. The reef varies from a leader to 6 inches. The truck road has been formed a further distance of 15 feet, making it 55 feet from level. The level from the straight shaft has been extended a further distance of 10 feet, making it 135 feet from straight shaft. The reef in the end of level is about 3 inches thick. No. 4 formation, No. 3 north level. Stopping has been carried on over this level. The reef varies from 3 to 9 inches; there is a lot of blank ground in this stoppe. Straight shaft. Referring to my last report, you will observe that we met a floor in the bottom of the shaft. The next sink bored soft, a good country in all the 23 holes drilled. We fired on Saturday, the 4th, taking up a 6 feet sink, and on the following Monday, after firing four holes in the south end of the shaft, a flow of water came in which kept us continually baling for four days before we reached the bottom of the shaft, the water coming in at the rate of about 1200 gallons per hour. As the bottom of the shaft was over 70 feet below the timber, we commenced to timber up the shaft, as I considered it unsafe to work on account of so much winding and the ground not being good. I expect to finish timbering in the beginning of the week. I think there can be no doubt about being in a formation in the bottom of the shaft. Quantity of stuff raised during the fortnight. No. 2 formation 61 trucks, No. 4 south level footwall 152 trucks, No. 4 formation 92 trucks, total 305 trucks. (Signed) W. Henderson.

PUNJOM.—The secretary of the Punjom Mining Company (Limited) advises us that he has received the following report from the mines manager on work done at Punjom during the month of November:—Mining August shaft 200 feet level has received our best attention, and I am pleased to say the prospects continue encouraging. The east or hanging-wall of the ore body we were piercing at date of my last report has been reached, and drives have been started to go north and south on its course. So far, the ore is of low grade, and I am now inclined to think that the best part of the chute of payable ore is still further to the south. This will be proved in a few weeks. The north drive on the course of Gillies' reef has been resumed, and 14 feet driven, making its total length from the No. 2 crosscut 90 feet. The reef has become very much broken and is very poor. We shall run this drive up under the chutes of ore found in the mill gully tunnel with all possible speed in hope of proving them at this depth and opening up this section of the mine. The new shaft has been connected, securely

timbered, and a substantial chamber or "plat" made. The necessary rails, including points and crossings, have been laid, and everything put in good working order, preparatory to putting a drive south under the western chute of ore now being worked at and above the intermediate level. Intermediate level. This point continues to yield a large quantity of ore for the mill, and will do so for some time yet. The stopes are without change to notice. Of course, you will see by an earlier part of this report that the new shaft has connected with the 200 feet level. A drive has been begun off this shaft to connect with the west chute of ore; we are working on the east and west reef, and has already been driven 17 feet. I need not tell you this drive will cross the course of Phillips' leader, at a point about 30 feet to the west, or where any payable ore had been found on it hitherto, and will be a further test for it. I am hopeful that we shall find payable ground on it there.—110 feet level. We have not yet been able to resume work in the crosscut to go out to the course of Gillies' reef at this level, owing to all the miners being fully employed elsewhere. We will attend to it as soon as possible, however.—New leader. There is no change to report here, the various stopes, &c., fully maintaining their output of ore for the mill. They will continue to do this for some months yet.—Drifage. The total drifage for the month is 608 feet 9 inches, or mine 1004 tons, made up as follows:—August shaft 825 tons, new leader 179 tons.—Milling. This was carried on during 27 days, crushing 1004 tons of ore for a yield of 500 ounces 12 dwts. of smelted gold.—General. The usual attention has been given to all work coming under this head. The whole of the concentrates and tailings have been fenced in, so as to secure them in case of floods; new houses have been built for our Kling coolies, and a new tramline laid down on strong trestle work to connect the New shaft with mill. A second European engineer for the mill has been engaged, and will soon be here for duty. My letters will have told you he will be employed in superintending the milling at night, and to assist Mr. Jolly generally.—Gold stealing. I regret to say the loss of gold we suffer through the dishonesty of our Chinese and native workpeople has become a serious matter, and calls for immediate and determined action. Hence I am increasing our police force, and engaging two Europeans as night watchmen. We are also putting a strong fence all round the principal workings with suitable gates for the ingress and egress of the workpeople. I fear we shall always suffer more or less from this cause unless the punishment meted out to offenders by the Government is made much more severe and adequate.—Labour. This continues fairly plentiful, but of late I notice a falling off in the supply of Chinese coolies, which I attribute to the precautions we are taking to prevent gold stealing.—Health. This is fairly good.—Rainfall. During the month the total rainfall was 13.5 inches.

PIGGS PEAK DEVELOPMENT.—The following report for the month of December has just come to hand.—Piggs Peak Reef. During the above-mentioned period development work has been proceeding satisfactorily. The drive connecting Nos. 1 and 3 quarries is well under way. The fire assay samples taken during the month from No. 3 quarry are as follows: No. 1, outcrop 12 feet wide, 23 grains; No. 2, outcrop 14 feet wide, 5 dwts. 19 grains; No. 3, outcrop 18 feet wide, 7 dwts. 18 grains; No. 4, outcrop 30 feet wide, 2 dwts. 23 grains. The gold in this immediate neighbourhood is very patchy, showing a good prospect at times and then again only colours. When further work is done, I shall be better able to judge the exact value of this rock. A systematic course of samples were taken from No. 1 quarry, with the following satisfactory result: No. 1, 20 feet below the surface, No. 1 quarry, 13 dwts. 14 grains; No. 2, 18 feet below the surface, No. 1 quarry, 2 ounces 18 dwts. 7 grains; No. 3, 20 feet below the surface, No. 1 quarry, 1 dwt. 23 grains; No. 4, 20 feet below the surface, No. 1 quarry, 13 dwts. 14 grains; No. 5, 20 feet below the surface, No. 1 quarry, 15 dwts. 13 grains; No. 6, 20 feet below the surface, No. 1 quarry, 1 ounce 18 dwts. 20 grains; No. 7, 20 feet below the surface, No. 1 quarry, 16 dwts. 12 grains; No. 8, 17 feet below the surface, No. 1 quarry, 9 dwts. 17 grains; No. 9, 17 feet below the surface, No. 1 quarry, 9 dwts. 17 grains. No. 4 shaft has been cleared of debris, and a substantial Grizzly is now in course of erection at the end of the east upper level, and above the shaft connecting with the main adit level. Underhand stoping has also been started in No. 2 quarry. The results of samples taken during the month are as follows:—No. 1, 14 feet below surface, No. 2 quarry, 9 dwts. 17 grains; No. 2, 12 feet below surface, No. 2 quarry, 1 dwt. 23 grains; No. 3, 18 feet below surface, No. 2 quarry, 4 dwts. 20 grains; No. 4, 20 feet below surface, No. 2 quarry, 9 dwts. 17 grains. Referring to my last report, I mentioned we were just getting into payable rock in No. 1 crosscut at the east upper level; this has now been proved to be approximately 12 feet wide, assaying 12 dwts. 15 grains. With this payable ore in sight in the crosscut, I am starting another quarry immediately over the same on the surface. The ore will be dumped down No. 3 shaft to the adit level. It will thus be seen that by the time the mill starts we shall have four quarries in working order, capable of supplying a very large quantity of ore per month. The average of the above fire assays show 13 dwts. per ton. 1100 tons of ore were dumped, making a total to date of 3484 tons at grass. From late calculations, we anticipate crushing 5 tons per stamp per 24 hours, or 150 tons per day, or approximately 4000 tons per month. The erection of the mill has been somewhat retarded, owing to the heavy rains experienced during this first fortnight, rendering transport of timber over these mountains utterly impossible, but I anticipate that by the time the electrical plant arrives the mill will be almost completed. The excavations at the dam are proceeding satisfactorily. The ground tram through the mine, and from each entrance of adit level to the mill, has been relaid, and is now in working order, the ore at present mined being dumped on each side of the rails.—Prospecting. We have discovered a large body of sandstone, about 800 yards east of the peak, which in places carries very good gold. If on further prospecting this should prove to be an extension of the peak sandstone, and equally gold-bearing, the prospects and success of the company are indeed assured, but at the present moment I will not express an opinion until further development work has been done. There are four prospectors out on the Havelock concession, one of whom lately struck a large body of quartz, which assays as follows:—No. 1, 4 dwts. 20 grains; No. 2, 6 dwts. 18 grains; No. 3, 10 dwts. 16 grains. But, again, I will not express an opinion until further work has been done. We have not met with any success as yet in the alluvial prospecting.—Mullumbidgee. We started the two Hentington mills about the middle of the month, but, unfortunately, just after starting one of the large ring dies broke, necessitating the whole mill being taken to pieces, to replace it by a new one. This, however, was accomplished with a little delay as possible. The miner employed in the mine is sinking a winze below the 100 feet level, the depth to date being 24 feet, and which has had to be close timbered throughout. As we are now encountering a large quantity of water, a hand pump is being erected. The man in charge informs me fairly good prospects are obtainable in the winze, but the reef is extremely patchy.

VIOLET.—The following are average assay value of drives on the main reef of the Violet Mine for the month of December: Violet shaft. 3rd level drive west, two samples, 3 feet, 11 dwts. 7 grains; 5th level drive west, nine samples, 5½ inches, 8 ounces 4 dwts. 2 grains; 5th level drive east, two samples, 3 feet 4½ inches, 1 ounce 3 dwts. 2 grains; 6th level drive west, three samples, 1 foot 4 inches, 1 ounce 1 dwt. 22 grains; 7th level drive west, three samples, 1 foot 9 inches, 17 dwts. 18 grains; 8th level drive east, three samples, 1 foot 1 inch, 11 dwts. 4 grains.—Assay results of samples taken from the Violet shaft, middle reef, January 8. 3rd level drive west, 3 feet 6 inches, 14 dwts. 14 grains; 3rd level rise west, 2 feet 6 inches, 6 dwts. 13 grains; 3rd level old stopes west, 2 feet 6 inches, 5 dwts. 20 grains.—Flora shaft. Reef in south drive 1 foot 6 inches, 2 dwts. 11 grains.

VILLAGE MAIN REEF.—Extract from mine manager, dated January 13: I think that the directors will like to hear that beyond the loss of (say) a fortnight's work the mine has not been seriously affected by the recent disturbance. This is satisfactory news, as the mine is situated in Johannesburg.

VIOLET CONSOLIDATED.—Political disturbances. The two skirmishes which took place between Dr. Jameson's force and the burghers representing the South African Republic occurred, the first at the Queen property and the second some distance on the southern side of the Violet. Fortunately, very slight damage, considering the circumstances, was done to your property. Mr. Watson's report, sent last week, explains all the circumstances, and I need add nothing further except that he was able to keep the work of the mine going in spite of all the circumstances against him. The ultimate result is still a matter of doubt, but it is confidently expected that no further disturbances will take place, as far as Johannesburg is concerned. The principal evil arising out of the position is that a large number of Kaffirs have left the Rand, and it will take a very considerable time to get them back again. This will affect all the mines to a large extent for the time being. We, however, appear to have been fortunate in being able, through the exertions of our manager, to keep work going, which has only been the case on a very few properties. The manager also reports as follows:—Constructional work.—Married quarters. The whole of the building is plated, and the masons engaged in building the inside wall.—Single quarters. The whole of the frame-work is erected, and the building half plated with iron.—Boarding house. All the foundations are built, and the wood-framing well advanced.—Hauling-engine for bottom of vertical shaft is in course of erection.—Workshops. All material is in order, but when it will be delivered on the property I cannot state. I am submitting for your approval plans for two main vertical shafts, the head gear and plan showing reef from surface down to the 8th level; also plan for a reservoir, capacity 840,000 gallons.

GOLD FIELDS OF LYDENBURG.—The following is a report on the properties by Mr. G. W. Starr, consulting engineer:—Capital. This company has a capital of £325,000 in 325,000 shares of £1 each.—Situation, area, &c. The property is situated, partly on the highlands and partly in the low country, in the district of Lydenburg, near Belvedere, Transvaal. It consists of 15 farms, as shown in the plan, as follows:—Craigiesburn 4000 morgen, Arthur's Seat 3050 morgen, London 3850 morgen, Wales 2475 morgen, Zocknag 2500 morgen, Brooklyn 3375 morgen, Chester 3000 morgen, Onverwacht 3750 morgen, Hebron 4000 morgen, Casteel 2800 morgen, Welgevonden 2940 morgen, Vooruitzicht 2845 morgen, Green Valley 3395 morgen, Bedford 3270 morgen, Violet Bank 3000 morgen, making in all an area of 49,162 morgen, equal to about 100,000 acres. There are also 4263 claimed owned already by the company, and 1060 claims held by the company under option, as follows:—Number of claims, 400; how held, option; name of farm, Clearstream. Number of claims, 24; how held, option; name of farm, Opdeberg. Number of claims, 129; how held, owned; name of farm, Opdeberg. Number of claims, 636; how held, option; name of farms, Clearstream and Diamond. Number of claims, 24; how held, owned; name of farm, Opdeberg. Number of claims, 400; how held, owned; name of farm, 200 Opdeberg, and 200 Milford. Number of claims, 976; how held, owned; name of farm, 126 Driefkops, 550 Marieskop, and 300 Opdeberg. Number of claims, 150; how held, owned; name of farm, Diamond. Number of claims, 160; how held, owned; name of farm, Milford. Number of claims, 600; how held, owned; name of farm, Milford. Number of claims, 400; how held, owned; name of farm, Milford. Number of claims, 200; how held, owned; name of farm, Milford. Number of claims, 200; how held, owned; name of farm, Milford. Number of claims, 824; how held, owned; name of farm, Milford. Number of claims, 200; how held, owned; name of farm, Milford. These claims are situated over different parts of the district, and active prospecting is going on. The majority of the farms owned by the company are covered with a thick growth of native timber, suitable for mining purposes, and there is sufficient to supply the wants of the Rand for some time to come. The proposed railway will be brought within a few miles of the centre of the property, thereby making transport very reasonable and bringing the property of the company within touch of Johannesburg. The whole ground is well watered, there being several running streams and rivers which can at any time be used for the purpose of motive power, thereby doing away to a great extent the great expense of coal, &c.—Reefs. The reefs in this country are lying almost horizontally between sandstones, the nature of the same being a quartz carrying considerable amount of oxide of iron, the gold being very evenly distributed throughout, and no difficulty arises in extracting same by the ordinary process of amalgamation as used on the Randt. At present Mr. C. S. Richardson, the general manager, is actively prospecting, in a systematic way, two of the farms owned by the company, viz., Welgevonden and Vooruitzicht, also several blocks of the claims, by means of adits, shafts, and open cuttings, in order to open up and prove any reef or series of reefs that may be on the ground. The claims have all been carefully picked and chosen wherever the formation warrants the possibility of finding gold reefs. Welgevonden. There has been considerable prospecting work done on this farm, the most important being what is known as Sherwell's drive. This drive or adit is some way into the side of the hill—about 400 feet having been driven—and has proved a reef of 40 feet wide and 16 inches thick for over a distance of 440 feet; and at present there is, in the face of the drive, a reef exposed of 18 inches in thickness, showing visible gold freely all over, the value being about 50 ounces to the ton. Of course this is a very rich pocket, and must not be taken as a criterion as to the value of the reef. The reef here is intact along the strike, but very broken along the dip, patches of reef lying between alternate strata of slate bars. A systematic way of prospecting is being carried out on this property with a view of catching and opening up other portions of the reef. From this mine there has been several hundred tons of ore taken out and crushed in a small three-stamp battery. The results of these crushings have been about 5 ounces over the plate, and there still remained in the tailings a value of 12 dwts. per ton. This reef, I believe, when thoroughly opened up, will prove very valuable. The facilities for working are of the best, there being a plentiful supply of water for power, and labour is also cheap and easily procured. We are now prospecting for this reef in depth, and will soon be in a position to tell more as to its permanency. On the surface here there is a small smith's shop erected for any smithy work, such as sharpening-drills &c., also a small rough house and stable for the use of the manager.—Vooruitzicht. This farm adjoins Welgevonden on the north, and the work done here consists of two drives or adits driven into the side of the hill, amounting, in all, to about 200 feet of driving. There is also a small shaft sunk to a depth of 28 feet, showing a large white, decomposed vein of quartz about 6 feet thick, lying horizontally between sandstone and slate, the panning from which runs from 1 dwt. to 5 dwts. At the ends of the two drives a crosscut is being put in at rights to ascertain, if possible, whether there is a shoot or a series of payable shoots.—Claims. We are prospecting on the different blocks of claims that we own and have under option, and several of these workings show well. On Milford, where we own over 2400 claims, prospecting is well under way to discover the Steip's reef, which should traverse throughout the whole of these claims. The reef is now opened out on the ground adjoining these claims, and from samples taken lately the results are very satisfactory. On the Opdeberg claims we are prospecting for the continuation of the Sherwell reefs, and from indications expect to soon have this reef opened up. I should recommend that the company continue its policy of acquiring options upon different farms and Government ground in this district, for although we have already a large area of ground, I deem it advisable to take advantage of getting these options now, as no doubt in a few years much higher prices will be ruling for the same ground, for the district is entirely unprospected. In conclusion, I might say that it is my opinion that your property should prove one of great value, as it is one of great possibilities, not only as a mining proposition, but for its value in timber and farming lands. At present an expert is reporting upon the possibilities as to its value in timber and agriculture.—(Signed) G. W. Starr, Consulting Engineer.

The final batch of letters of allotment in the VICTORIA REEF GOLD MINE (LIMITED) has been posted.

BRITISH BROKEN HILL PROPRIETARY.—Mining manager's report for the week ending December 24: Blackwood shaft, 300 level. West crosscut extended 6 feet, total from plat 144 feet. Face extremely hard, but fair sulphides beginning to appear in bottom. —200 level. No. 1 winze in No. 1 west crosscut sunk 2 feet, total depth 77 feet. Bottom in very hard sulphides of milling grade. We picked out 9 tons sulphides, assaying 14 per cent. lead, 13 ounces silver, and 10 per cent. zinc. North drive off No. 1 west crosscut lengthened 11 feet, total 60 feet. Face to-day much disturbed. We mined 25 tons sulphides, assaying 16 per cent. lead, 13 ounces silver, and 21 per cent. zinc. North drive in western extension advanced 4 feet, total 70 feet, showing milling sulphides. We broke 15 tons, assaying 17 per cent. lead, 10 ounces silver, and 19 per cent. zinc. —Howell shaft, 300 level. West crosscut lengthened 5 feet, total 214 feet. Face continues very hard. —200 level. South drive off No. 2 west crosscut driven 10 feet, total from crosscut 97 feet. Face rather mullocky. We mined 25 tons sulphides, assaying 16 per cent. lead, 13 ounces silver, and 21 per cent. zinc. Westward crosscut off above drive lengthened 6 feet, total 27 feet. Still carrying splendid sulphide ore. We broke 27 tons sulphides, averaging 22 per cent. lead, 14 ounces silver, and 23 per cent. zinc. —Surface. Good progress still being made on new digging plant; have commenced new tramway connecting railway line with the mill. New changehouse nearly finished. Fair progress made in machine shop and fixing up store-room. —Ore shipment. Dispatched during week, nine trucks sulphide ore to Block 14 Mine, also 20 trucks second class carbonate ore from Marsh shaft to Block 14 works, Port Adelaide. The following has been delivered and sold to Block 14 smelting works. Port Adelaide 110½ tons (net) second class carbonate ore from Marsh shaft, containing 25½ tons lead and 5556 ounces silver. —Week's assays. Carbonates 26 per cent. to 49.5 per cent. lead, silver 39 to 99 ounces silver per ton; sulphides 7.1 to 23 per cent. lead, 9.5 to 29.5 per cent. zinc, and 7.1 to 16.3 ounces silver per ton.

BREMNAES GOLD.—The following report has been received from the mine dated Hagesund, February 3:—Risvig Mine. Good progress is being made in driving 300 north level making headway 12 feet weekly. Just now the lode is a trifle irregular in appearance, the amount of quartz though remains constant, and the lode is running between good walls. Six men are engaged sinking in bottom of 300 level to effect communication with 400 below. The winze is now 56 feet below level on dip of lode, and at present rate of sinking the men should communicate within the month. There is a capital quartz lode in this working, and as soon as the winze is through a good section of ground will be open for stopping. The 200 south level is without change; the lode has an average width of 4 feet, with a quartz run, 10 inches wide running with footwall. There is a big strong quartz lode in 100 feet south level, and parts of the lode show an abundance of mineral. —Gapleskog Mine. The ground in the bottom level is very hard, so that progress is slow. At present there is 10 inches of quartz in end of usual good quality. In rise in back of upper level the quartz is from 6 to 10 inches wide, and stones showing gold are daily brought from the working. A stoep in back of same level shows quartz nearly 2 feet in width, containing galena and copper pyrites, and showing gold. —Fladenes Mine. The winze in open cutting has been sunk 12 feet, and has in present bottom a quartz lode over 3 feet wide. The quartz is of good quality and appearance, and is well mineralised. Surface erections are making such satisfactory progress as the prevalent exceptionally stormy weather allows.

GRAVEN'S CALEDONIA.—The following fortnightly report has been received from the mine, dated Charters Towers, December 20:—In the underhand stoep from No. 8 old level the reef is about the same as last reported. In the two stoeps in the end of the crosscut the reef is about 1 foot thick with 2 feet of soft formation. In the two stoeps over No. 8 level the reef is about 8 inches thick. In the two stoeps over the hanging wall reef the stone is about 7 inches, in the other stoep the reef is about 10 inches of good quality stone. This stoep is where No. 7 crosscut is supposed to come through. No. 7 crosscut has been extended a further 8 feet, making a total from the starting point of 151 feet. Bance and party have got about 5 tons of stone from the stalling. Hooper and party have extended No. 6 level a further 5 feet, making a total of 21 feet from the starting point, and there is about 3 inches of stone in this level, and the ground has changed for the better, and they have got about 8 tons of stone broken. Bowater and party have extended No. 5 level a further 4 feet, making a total of 17 feet from the starting point. In this level there is about 5 inches of stone. This party have got about 14 tons broken. Blade and party have during this fortnight run through a crushing at the New Queen mill of 22 tons for 20 ounces 12 dwts. of retorted gold. Shepherd and party started their tribute on the 17th inst. in the end of No. 4 level. The haulage of quartz for the company for this fortnight is 21 tons. —(Signed) G. Cabassi, manager.

COROMANDEL.—Superintendent's report for fortnight ending January 11: Prospect shaft. This shaft has been sunk during the fortnight 24 feet, and is now 575 feet from surface. —500 level south. The crosscut east of this level is advanced a further 20 feet, making its total length 345 feet. There is no change in the ground. —200 level north. The drift north-east from the winze has been suspended, and sinking resumed. Sunk 4 feet, total 36 feet. Lode 1 foot 6 inches wide, worth 6 dwts. of gold per ton. —100 level crosscut west driven 14 feet, total 47 feet 6 inches. No discovery. —East shaft, 600 level south of winze driven 26 feet, total 66 feet 6 inches. Lode 1 foot 6 inches wide, assaying 1 ounce 4 dwts. of gold per ton. —320 level north driven 20 feet, total 311 feet from shaft. During the fortnight the lode opened to 1 foot 6 inches of solid quartz, but at present the lode is only 6 inches wide, assaying 2 ounces 6 dwts. of gold per ton. —200 level north. Driven 40 feet, total 322 feet from shaft. For the last 20 feet the drive has been in a cross dyke. —100 level crosscut east driven 14 feet, total 64 feet. Has not yet intersected the lode.

COLOMBIAN HYDRAULIC.—December 18: Run No. 205. I had arranged to clean up last Tuesday, but shall not now do so until next week. —New opening. Work is progressing in the Sieto opening, which will command part of the southern side of the mine, and I hope we shall be able to begin washing there early next month. —Adit. With much regret I have to report that both the new winze, mentioned in my letter of November 21, have proved the channel equally bare of gold to the first winze and shaft. I do not advise suspending the work of the main drive of the adit; on the contrary, I strongly advise continuing it. The main part of the heavy cost recently incurred in the adit has been with the winzes and cross drives below the adit level, owing to pumping and having to hand up the dirt. Grade is now to be brought in nearly 20 feet below the level of the old sluices. I expect this work will pay fairly well. After the grade is brought in we shall be in a very much better position to test the channel below Murillo's work.

CONSOLIDATED MURCHISON.—Extracts from letter received from the mine manager, dated December 26: Re mines. The Day Day Dawn Mine is now looking better than ever. In 150 feet level I am now breaking through from footwall to the hanging wall. I find then that the reef all through has a greater width at 150 feet level than at 100 feet; besides, the quartz seems to be of a better quality. There is in Day Day Dawn a body of quartz opened up between 100 feet and 150 feet level of following dimensions:—150 feet long, 73 feet high, and average of 12 feet width, which will yield more than ½ ounce in battery. I have kept myself well inside the dimensions. The length of this body will increase, as I am continuing the 150 feet level. It is a good thing for this mine's future that the good quartz is increasing not only in quantity, but in quality, as it goes down. The usual thing is that a reef has a rich upper level, and then changes into low grade quartz. I am now crushing with 10 heads quartz only from 150 feet level, and with 10 quartz from 100 feet level and other parts of the mine. —Day Dawn west. I am now timbering up Wallace's shaft, so I can go on sinking this further down. From the water level in No. 1 shaft I am now extending levels both east and west. This gives me at least 28 feet of backs to stoep out up to the old workings. There is some very good quartz from this shaft. —Cyanide plant. The tanks are now all ready, pumps put in position, and precipitation house on good way

to be finished. —New battery. I have already received some loads of foundation timber and two boilers, and a lot of machinery is on the road now.

FORBES REEF.—The mine manager, under letter dated January 2, reports progress for the month of December as follows:—Avalanche mill, 10 stamps ran 11 days, and 20 stamps ran 10 days 5 hours, crushing 1478 tons of ore. Smelted gold won 109 ounces 7 dwts, 14 grains. —Electric transmission plant. For two weeks there was only sufficient water for turbine to develop and transmit power to drive 10 stamps, Avalanche mill. Since then we have had rains, and there is now enough water for all requirements. During a thunderstorm the lightning struck the transmission wires, and seriously injured the armature and field magnets of the motor at Avalanche. This caused a stoppage of two days repairing the damage. No damage was done to the line or dynamo at central station. The plant is now running satisfactorily. —Boring No. 3 bore hole south of shaft. This bore hole has been sunk 64 feet this month, through a solid body of barren quartz. The total depth of this bore hole is now 238 feet. —No. 8 borehole north of shaft. This borehole has been sunk 50 feet this month through hard barren quartzite. The total depth of this borehole is now 146 feet. The scarcity of Brazilian board (none being obtainable in South Africa at the present time has delayed boring operations this month. A supply from London has been cabled for. —Prospecting. One miner with four boys has been following up the extension on strike of the Red reef this month. This reef has been found and proved by means of open cuttings to extend about a mile, some parts 50 to 60 feet wide, carrying a little gold all through, but not in payable quantities. I now propose to stop further prospecting there until a borehole can be sunk to try the value of this reef in depth. —Avalanche Mine. The necessary development has been done to keep the ore reserves in sight a long way ahead of mill requirements. Tram lines have been extended and repaired. —Working costs. Working costs have been reduced. The returns of gold will cover working costs this month.

GREAT FINGALL REEFS.—The following are extracts from mine manager's report, dated December 7:—No. 6 shaft, south drive on reef A. Samples for the week yield 3 ounces 2 dwts. 16 grains per ton. Samples for week ending November 30 from this reef gave 1 ounce 8 dwts. 18 grains per ton. —No. 1 shaft, north drive on reef B. The widening out of this drive is now completed, and with the exception of putting in the timber is all ready for starting stoping operations.

KABONGA.—Fortnightly report from the mine, dated December 28: I have the honour to report progress at the mine for the fortnight ending at this date. The main drive going west-north-west at the bottom level has been extended 52 feet, and is now in 78 feet from start in light country, which shows at present indications of becoming easier for driving, which will, I trust, ensure better progress being made. The new rise going up from end of south-west main level has been put up 34 feet, and is now up from floor of level 52 feet. Ground still tight and cemented. The air being light and hot below, all 6-inch air pipes have been taken out and 8 inch pipes put in their stead, which has considerably improved the ventilation. The main level has been repaired and newly timbered where required. No. 1 boiler and flues have been cleaned out thoroughly during the holidays. In a few days No. 2 boiler and flues will be similarly dealt with, and both boilers will be tested in accordance with the Mines Act. Three days have been lost as Christmas holidays, which has interfered with progress during the fortnight.

KEMPINKOTE.—Superintendent's report for fortnight ending January 13: Garland's shaft. In the 500 crosscut about 20 feet west of shaft we started to drive both north and south. 500 north drive has been driven 12 feet, total distance from main crosscut 12 feet. Lode in the end full size of the drive, assaying 1 dwt. of gold per ton. 500 south drive has been driven 27 feet 3 inches, total distance from main crosscut 27 feet 3 inches. We are carrying the footwall and about 4 feet of the lode, assaying 1 dwt. of gold per ton. The 345 north drive has been driven 23 feet 3 inches, total distance from the main crosscut 250 feet 9 inches. We carried about 2 feet of the footwall part of the lode, assaying 1 dwt. of gold per ton. On January 7 this drive was communicated with the 341 south drive, Henty's shaft. 345 north drive No. 1 crosscut east has been driven 4 feet 6 inches, total distance from main level 80 feet. 77 east of main level the footwall was met with, which shows the lode to be from 30 to 40 feet wide at this point. The drive has been suspended. 345 south drive No. 2 crosscut east has been driven 4 feet 6 inches, total distance from main level 18 feet. At this point hard schist was met with; the drive was stopped. —345 south drive No. 2 crosscut west. 280 feet south of main crosscut has been driven 7 feet 6 inches, total distance from footwall 13 feet 6 inches. This drive has been driven through lode, assaying 1 dwt. 12 grains of gold per ton. The ground in the end is mixed. 245 north drive crosscut east at the bottom No. 2 winze has been driven 8 feet 3 inches, total distance 16 feet 3 inches. Lode in the end full size of the drive, assaying 1 dwt. 7 grains of gold per ton. —245 south drive has been driven 23 feet 3 inches, total distance from main crosscut 554 feet 3 inches. We are carrying about 5 feet of the footwall part of the lode assaying 12 grains of gold per ton. —245 south drive No. 3 crosscut west has been driven 9 feet 3 inches, total distance from footwall 39 feet 3 inches. About 35 feet from footwall a small stringer of the lode was met with of no value; the ground in the end is schist. —183 south drive No. 2 crosscut east has been driven 8 feet 3 inches, total distance 20 feet 3 inches. Lode in the end full size of the drive, assaying 1 dwt. of gold to the ton. Henty's shaft 341 south drive has been driven 24 feet 6 inches, total distance from main crosscut 165 feet 3 inches. We carried about 2 feet of the footwall part of the lode assaying 1 dwt. of gold per ton. After this drive was holed to the 345 north drive Garland's shaft, we put the machine to drive north upon the lode about 100 feet south of main crosscut, and have driven it 8 feet, total distance 8 feet. Lode in the end full size of the drive, assaying 7 dwts. of gold per ton.

MOUNT LYELL.—The manager's report for week ending December 19: South drive No. 3 tunnel. The face has been advanced 3 feet, making the total length 522 feet. The pyrites are breaking small, making progress slow. —South drive, No. 4 tunnel. Here, owing to sharp turn made by the wall, no actual progress has been made, the men being engaged stripping the pyrites wall to find in which direction it was making. —No. 2 crosscut, No. 5 tunnel. This crosscut has been advanced 5 feet, total 9 feet. Face in solid pyrites. Rainfall for week 9.60 inches. —Progress report for week ending December 20: Hauling line. Terminal cutting in progress. —Smelter building. Roof over blast department finished, putting on roofing iron, laying floor over flues and in bins, and siding later, &c. —Bin approaches. Preparing for getting in blowers over same. —Hill flue. Taking out centres, cementing arch, flooring finished. —Main chimney. Height above grade 86 feet. —Blowers. Foundations of No. 2 completed. —Boilers. Erection in progress. —Blast furnaces. Parts coming in and erection started. —Converter site. Elevator recess excavated. Weather extremely bad, wettest week of the year, over 12 feet of rain for year.

MOUNT ZEEHAN (Tasmania).—Manager reports for week ended December 24: No. 8 lode, No. 2 level. Crosscut from No. 1 rise west extended 9 feet 6 inches, total 30 feet 6 inches, the whole distance being in lode matter, the last few feet showing more strings of galena, but not enough to save. Expect to cut footwall and drain No. 1 level in about 7 feet more. We stop to-day for Christmas holidays, and shall clean boiler. Concentrator has been running on ore from Zeehan-Montana Company.

NEW GUSTON.—The following cable information has been received from the mine:—Output December month: Ore shipped 1220 tons; value (estimated) \$17,000; mine expenses \$12,750. Output January month: Ore shipped 1236 tons; value not yet ascertained. This tonnage—viz., 1226 tons, consisted of 10 carloads (126 tons) of high grade ore shipped to the San Juan smelter (Durango), and 94 cars (1100 tons) sent to the Silverton smelter. The mine superintendent, under date January 14, reports, viz.: No. 7 level, north drift, No. 2 stoep, south of raise. Height of stoep over back of level 86 feet 6 inches; length 56 feet; average width of ore 3 feet. Character of ore, iron pyrites. Value from 12 to 36

ounces silver per ton, gold 1-10th to 3-10ths ounce per ton. —No. 10 level, south drift, stoep north of winze. Length of stoep 53 feet; height over back of level 87 feet; width of ore from 3 to 5 feet. Character of ore, iron pyrites. Value, silver 10 to 19 ounces per ton, gold 1-10th to 2-10ths ounce per ton; copper, 2 per cent. —South drift, stoep south of winze. The north portion of stoep has been worked to the floor of No. 9 level for a length of 70 feet. Length of stoep 17 feet; height over back of level 87 feet; width of ore 3 to 5 feet. Two classes of ore are being met with—viz., (1) iron pyrites, (2) yellow copper. Value of ores: (1) Iron pyrites 10 to 15 ounces silver per ton, gold 1-10th to ½ ounce per ton, copper 3 to 4 per cent. (2) Yellow copper, silver 15 to 25 ounces per ton, gold ½ to 7-10ths ounce per ton, copper 7 to 9 per cent. —North drift, stoep. Length of stoep 29 feet; height over back of level 8 feet; width of ore in north portion of stoep 1 foot 6 inches. For 15 feet in length south portion of stoep ore scattered. Character of ore iron pyrites, value 14 to 21 ounces silver per ton, gold 1-10th to 3-10ths ounce per ton, copper 1 to 2 per cent. —No. 11 level, south drift, stoep north of winze. Length of stoep 21 feet; height over back of level 84 feet; width of ore 5 feet. Character of ore iron pyrites and yellow copper. Value of ores: (1) Iron pyrites, silver 7 to 10 ounces per ton, gold 1-10th to 3-10ths ounce per ton, copper 1 to 3 per cent. (2) Yellow copper, silver 14 to 15 ounces silver per ton, gold 3-10ths to ½ ounce per ton, copper 8 to 9 per cent. South drift, stoep south of winze. Length of stoep 40 feet; height over back of level 73 feet; average width of ore, 9 feet. Three classes of ore are being met with—viz., (1) Peacock copper. (2) Yellow copper. (3) Iron pyrites. Value of ores:—(1) Peacock copper, silver 125 ounces per ton, gold ½ ounce per ton, copper 28 per cent. (2) Yellow copper, silver 14 to 16 ounces per ton, gold 3-10ths to ½ ounce per ton, copper 8 per cent. (3) Iron pyrites, silver 7 to 9 ounces per ton, gold 2-10ths to 3-10ths ounce per ton, copper 2 to 3 per cent. —No. 12 level, south drift, stoep south of winze. Length of stoep 48 feet; height over back of level 53 feet; width of ore from 3 to 11 feet; average width 7 feet. Two classes of ore are being met with—viz., (1) iron pyrites. (2) Yellow copper. Value of ores:—(1) Iron pyrites, silver 7 to 10 ounces per ton, gold 1-10th ounce per ton, copper 2 to 3 per cent. (2) Yellow copper, silver 14 to 17 ounces per ton, gold 2-10ths to 3-10ths ounce per ton, copper 9 to 11 per cent. —No. 13 level, south drift, cross drift. Distance driven 15 feet, total distance driven east from south drift 67 feet. In addition to the 15 feet driven in the cross drift we have driven back north 6 feet on the streak of soft porphyry mixed with ore referred to in my last report. At present this prospect drift north does not look very promising, the ground having become much harder and the ore narrowed up considerably. If an improvement is not met with within a few days, I purpose bringing the men back to open in on the north side of the cross drift about 25 to 30 feet from the south drift.

ROBINSON GOLD MINING COMPANY.—The general manager's summary of operations of the company for December, together with statements of expenditure and revenue, are as follow: Mine. Quartz mined 16,617 tons. —Development. Driven 603 feet; raises 54 feet, crosscuts 238 feet, total 895 feet. —Main incline shaft (west), 4th level driving west on south reef 25 feet. 5th level driving west on south reef 18 feet, 6th level driving east on south reef 42 feet, raise 33 feet. 7th level driving west on main reef 34 feet, driving east and west on south reef 63 feet. 8th level driving west on main reef 38 feet, crosscut 8 feet. 9th level driving east and west on main reef 56 feet, driving east on south reef 35 feet, crosscut 40 feet. 10th level driving east and west on main reef 30 feet, driving east and west on south reef 20 feet, crosscuts 39 feet. —Main incline shaft (east). 5th level driving east on main reef 6 feet, crosscut 14 feet, raise 21 feet. 6th level driving west on main reef 8 feet, crosscut 42 feet. 8th level driving east and west on main reef 91 feet, driving east and west on south reef 47 feet, crosscut 31 feet. 9th level driving east and west on main reef 10 feet, driving east and west on south reef 40 feet, crosscuts 54 feet. 10th level driving east and west on south reef 37 feet, crosscuts 10 feet; sump for electric pump 3768 cubic feet. Total 895 feet. —Mill. Stamps at work 120, net running time 30½ days; tons crushed 16,617, tons per stamp per diem 4.6; gold won from above 10,777 ounces 1 dwt. —Chlorination and cyanide works. Gold won from own concentrates (by chlorination) 1100 ounces, ballion from tailings (cyanide process) 1709 ounces 10 dwts., from own ore 13,586 ounces 11 dwts.; gold from concentrates purchased (by chlorination) 2437 ounces 15 dwts. Total 16,024 ounces 6 dwts.

EXPENDITURE AND REVENUE.		Crushed 16,617 tons.	
		Working expenditure.	
			Cost per ton,
Mining account (including mine maintenance).....	£8725 3 2		£0 10 60 1
Milling account (including mill maintenance).....	2,564 4 4		0 3 1 0 1
General maintenance account....	470 5 7		0 0 6 7 9
General charges.....	1,093 3 4		0 1 3 9 0
	£12,852 16 5		£0 15 5 6 4
Expenditure on mine development, (including main shafts).....	2,677 0 9		0 3 2 6 6
Cost of concentrates purchased (including receiving).....	5,716 19 8		£23,851 15 1
Profit for month	35,181 18 3		£59,033 13 4

REVENUE.	
Gold account (mill), 10,777 ounces 1 dwt	£38,527 19 0
Sundry revenue	572 0 0
	£39,099 19 0

Retreatment account:—	
Gold account (tailings), 1709 ounces 10 dwts.	£5,641 1 3
Gold account (own and purchased concentrates), 3537 ounces 15 dwts.	£14,504 16 3
	£20,145 17 6
Less amount received below book entry for October gold	212 3 2
	£20,357 14 4

The sum of £204 17s. 3d. has been expended on account of mill extension during the month. Owing to the shortage of native labour, we had to use machine drills in the stoeps of the main reef, whereby a larger percentage than usual of low grade ore and waste was sent to the mill.

ROYAL SOVEREIGN (25 mile, Coolgardie).—Fortnightly report, December 28: No. 1 eastern shaft sunk 9 feet, total depth 100 feet. The reef here has changed, being much more solid. Am taking the men from this shaft, and putting them into the crosscut in the main vertical shaft, where the lode should be struck at about 45 feet. —No. 1 western shaft has been sunk 6 feet 6 inches, total depth 99 feet 6 inches; reef formation unchanged. —No. 3 western shaft sunk 6 feet 6 inches, total depth 63 feet; the reef is getting more defined and improving in quality, showing good prospects of payable gold. The reefs become more settled and defined as depth is attained.

ON and after the 5th inst. the offices of the New Belgium (Transvaal) Land and Development Company (Limited) will be at 79, Gracechurch-street, E.C.4.

ACHILLES GOLD FIELDS (N.Z.).—The managing director at the mines reports as follows, under date of December 16:—North lode No. 4 level east. The lode in stope has been fairly good and profitable, but just at present the lode in the eastern part is very rich and wide, producing ore worth 10 ounces per ton. Have sunk a winze from No. 3, immediately over the above stope, in which the lode is very rich, worth 20 ounces per ton.—No 2 stope will be given a fair amount of quartz. Lode 4 feet wide, with profitable grade ore.—Main lode, No. 4 level. The contract for stoping the bottom of this level for a large well, preparatory to sinking shaft will be completed to-morrow. The work has produced a large amount of profitable quartz for the mill, and shows a good prospect for the deeper ground. Sinking will be commenced immediately for a No. 5 level.—Main lode, No. 2. A stope is in operation in the back of this level on leader lead, and its branches are producing profitable quartz.—In the course of a few days this drive on the main lode will be resumed with two men, as I anticipate a large course of gold between this and the main shaft. Also a winze will be sunk on a short run of gold, lately passed over by driving.—Main lode, No. 3 level. Drive will also be extended by two men for the same reason as stated at No. 2 level.—Main lode, a lit level. A winze will be commenced to-morrow, four men, to sink upon a prospect, evidently the top of run stated as existing in No. 2 and 3 levels.—The new shaft has been completed from 40 feet above No. 2 level to 25 feet below No. 3, requiring 60 feet to reach No. 4 level, and 140 feet to add, and will probably be 60 feet from a lit to surface.

CHAMPION REEF.—Fortnightly report of Captain James Rowe, superintendent, dated January 15: Dalyell's shaft. This shaft has been stripped down 14 feet 6 inches, total depth 851 feet 6 inches.—Garland's shaft. This shaft has been sunk 7 feet, total depth 995 feet 6 inches. Lode 2½ feet wide, assaying 1 ounce 15 dwts. of gold per ton. The 940 feet level north has been driven 14 feet, total length 330 feet. Lode 4 feet wide, assaying 1 ounce 16 dwts. of gold per ton. No. 2 rise above level risen 17 feet 9 inches, total height 40 feet 9 inches. Lode 3½ feet wide, assaying 1 ounce 2 dwts. 14 grains of gold per ton. 940 south driven 23 feet 6 inches, total length 269 feet 9 inches. Lode 2 feet 3 inches wide, assaying 1 ounce 12 dwts. of gold per ton. No. 1 rise above level risen 15 feet 3 inches, total height 81 feet 6 inches. Lode 2½ feet wide, assaying 12 dwts. 12 grains of gold per ton. The 840 feet level north of shaft has been driven 19 feet, total length 736 feet 9 inches. This end is still in the disordered ground. No. 5 rise above level risen 14 feet 6 inches, total height 26 feet 6 inches. Lode 2 feet wide, assaying 1 ounce 6 dwts. 12 grains of gold per ton. The 740 feet level has been driven 28 feet 3 inches, total length 959 feet 9 inches. Lode 5 feet wide, assaying 1 ounce 15 dwts. of gold per ton. No. 6 rise above level risen 9 feet, total height 64 feet. Lode 4 feet wide, assaying 1 ounce 10 dwts. 12 grains of gold per ton.—Ribblesdale's shaft. This shaft has been sunk 8 feet 6 inches, total depth 688 feet 9 inches. Lode 9 inches wide, assaying 1 ounce 10 dwts. of gold per ton. The 640 feet level north has been driven 22 feet 6 inches. Lode 1 foot 6 inches wide, assaying 1 ounce 12 dwts. of gold per ton. The 640 south of east crosscut south of shaft driven 19 feet, total length 111 feet 6 inches. Lode 3 feet wide, assaying 1 ounce 18 dwts. of gold per ton.—Carmichael's shaft. This shaft has been sunk 4 feet 3 inches, total depth below the 540 feet level 62 feet 3 inches. Lode 1 foot 6 inches wide, assaying 1 ounce 13 dwts. of gold per ton. The 540 feet level north of east crosscut driven 3 feet, total length 284 feet 3 inches. This is communicated with 515 south of Rowe's shaft. No. 4 new rise (100 feet north of No. 3) risen 13 feet. Lode 4 feet wide, assaying 16 dwts. 12 grains of gold per ton. No. 3 rise risen 9 feet 6 inches, total height 51 feet. Lode 1 foot 6 inches wide, assaying 10 dwts. 12 grains of gold per ton. The 440 feet level north of east crosscut driven 15 feet 9 inches, total length 57 feet 6 inches. Lode 9 inches wide, assaying 13 dwts. 2 grains of gold per ton.—Rowe's shaft. This shaft has been sunk 6 feet 6 inches, total depth below the 515 feet level 94 feet. Lode 9 feet wide, assaying 2 ounces 12 dwts. 22 grains of gold per ton. Winze below 515 north sunk 8 feet 3 inches, total depth 70 feet. Lode 3 feet wide, assaying 1 ounce 19 dwts. 20 grains of gold per ton. The 515 feet level south of shaft driven 2 feet 6 inches, total length 86 feet 6 inches. This is communicated with 540 north of Carmichael's shaft.—New vertical shaft. This has been sunk 13 feet 9 inches, total depth 44 feet 9 inches. We are at present sinking by hand labour, but are now erecting a small compressor, which we hope to complete in a short time. By the aid of this we shall make greater speed. We are also erecting the winding engine that has been transferred from Rowe's shaft, which will greatly facilitate the discharge of stuff from the shaft.—Stopes. Dalyell's shaft. Stope above 620 south of 530 south winze cut 9 fathoms 3 feet 9 inches. Lode 4 feet wide, assaying 18 dwts. 1 grain of gold per ton. Stope north of winze cut 8 fathoms 4 feet 6 inches. Lode 3 feet wide, assaying 1 ounce 8 dwts. 8 grains of gold per ton. Stope below 440 north of south winze cut 8 fathoms 9 inches. Lode 3 feet wide, assaying 18 dwts. 20 grains of gold per ton.—Garland's shaft. Stope above 840 north of No. 3 north rise cut 16 fathoms 5 feet 9 inches. Lode 3 feet wide, assaying 1 ounce 15 dwts. 8 grains of gold per ton. Stope below 630 south of 740 No. 2 north rise cut 21 fathoms 1 foot 3 inches. Lode 4 feet wide, assaying 1 ounce 12 dwts. of gold per ton. Stope above 630 south of No. 6 north rise cut 12 fathoms 4 feet. Lode 4 feet wide, assaying 1 ounce 18 dwts. of gold per ton. Stope north of rise cut 21 fathoms 1 foot 6 inches. Lode 3½ feet wide, assaying 16 dwts. 22 grains of gold per ton. New stope north of No. 7 rise cut 8 fathoms 5 feet 9 inches. Lode 6 feet 6 inches wide, assaying 1 ounce 2 dwts. 14 grains of gold per ton. Stope above 530, south of No. 8 north rise, cut 7 fathoms 4 feet 3 inches. Lode 8 feet wide, assaying 1 ounce 2 dwts. 14 grains of gold per ton. Stope north of No. 7 rise cut 6 fathoms 2 feet 9 inches. Lode 6 feet wide, assaying 1 ounce 2 dwts. 13 grains of gold per ton. Stope south of rise cut 5 fathoms 4 feet. Lode 4 feet wide, assaying 1 ounce 3 dwts. of gold per ton. Stope north of No. 6 rise cut 5 fathoms 4 feet 3 inches. Lode 4 feet wide, assaying 16 dwts. 13 grains of gold per ton. Stope north of No. 2 rise cut 3 fathoms 1 foot 3 inches. Lode 8 feet wide, assaying 1 ounce 12 dwts. 8 grains gold per ton. Stope south of rise cut 11 fathoms 4 feet 6 inches. Lode 2 feet wide, assaying 1 ounce 3 dwts. of gold per ton. Stope above 530 north of rise south of west crosscut cut 4 fathoms 4 feet 6 inches. Lode 2 feet wide, assaying 1 ounce 6 dwts. of gold per ton. Stope below 440 north of 530 No. 8 north winze cut 12 fathoms. Lode 6 feet wide, assaying 12 dwts. 14 grains of gold per ton. Stope north of No. 6 rise cut 8 fathoms 3 feet 6 inches. Lode 6 feet wide, assaying 1 ounce 10 dwts. of gold per ton. Stope south of rise cut 4 fathoms 1 foot. Lode 5 feet wide, assaying 1 ounce 6 dwts. 12 grains of gold per ton. Stope south of No. 4 rise cut 18 fathoms 1 foot. Lode 4 feet wide, assaying 1 ounce 6 dwts. 3 grains of gold per ton. Stope north of No. 2 rise cut 1 fathom 9 inches. Lode 8 feet wide, assaying 1 ounce 2 dwts. of gold per ton. Stope south of rise cut 11 fathoms 4 feet 6 inches. Lode 6 feet wide, assaying 1 ounce 3 dwts. 1 grain of gold per ton. Stope north of No. 1 rise cut 15 fathoms 5 feet. Lode 6 feet wide, assaying 1 ounce 12 dwts. of gold per ton. Stope below 440 south of winze at west crosscut cut 10 fathoms 3 feet 6 inches. Lode 3 feet wide, assaying 16 dwts. of gold per ton. Stope below 340 south of 440 north of No. 3 north rise cut 9 fathoms 3 inches. Lode 6 feet wide, assaying 1 ounce 12 grains of gold per ton. Stope below 340 north of 440 No. 2 north rise cut 8 fathoms. Lode 4 feet wide, assaying 1 ounce 2 dwts. of gold per ton. Stope south of rise cut 4 fathoms 5 feet. Lode 5 feet wide, assaying 1 ounce 6 dwts. of gold per ton. Stope below 340 north of north winze cut 3 fathoms 4 feet 3 inches. This is suspended. Stope south of winze cut 7 fathoms 3 inches. Lode 2½ feet wide. This is suspended for a time. Stope below 340 north of 440 rise south of west crosscut cut 3 fathoms 9 inches. Lode 2½ feet wide, assaying 1 ounce 14 dwts. of gold per ton. Stope below 340 north of south winze, cut 2 fathoms 4 feet 6 inches. This is suspended. Stope above 240 north of No. 2 north rise cut 6 fathoms 2 feet 3 inches. Lode 4 feet wide, assaying 1 ounce 4 dwts. 6 grains of gold per ton. Stope north of No. 1 rise cut 1 fathom 2 feet. Lode 2 feet wide, assaying 1 ounce 5 dwts. of gold per ton. Stope below 240 south of winze at west crosscut

cut 14 fathoms 3 inches. Lode 2 feet wide, assaying 1 ounce 14 dwts. of gold per ton.—Ribblesdale's shaft. Stope above 640 south of east crosscut south of shaft cut 7 fathoms 3 feet. Lode 2½ feet wide, assaying 1 ounce 5 dwts. 5 grains of gold per ton. Stope above 540 south north of No. 1 rise cut 4 fathoms 3 feet 6 inches. Lode 3 feet wide, assaying 1 ounce 13 dwts. of gold per ton. Stope north of No. 3 rise cut 5 fathoms 3 feet 6 inches. Lode 3 feet wide, assaying 1 ounce 10 dwts. of gold per ton. Stope north of No. 4 rise cut 4 fathoms 9 inches. Lode 3 feet wide, assaying 1 ounce 5 dwts. of gold per ton. Stope above 540 north of No. south rise cut 3 fathoms 1 foot 3 inches. Lode 2½ feet wide, assaying 1 ounce 3 dwts. of gold per ton. Stope south of rise cut 3 fathoms 9 inches. Lode 2 feet wide, assaying 1 ounce 16 dwts. of gold per ton. Stope above 440 south of shaft cut 4 fathoms 5 feet 9 inches. Lode 2 feet wide, assaying 13 dwts. 10 grains of gold per ton. Stope above 440 south of No. 2 west crosscut cut 6 fathoms 1 foot 6 inches. Lode 2 feet wide, assaying 1 ounce 12 dwts. of gold per ton. Stope above No. 1 west crosscut cut 8 fathoms 1 foot. Lode 6 feet wide, assaying 1 ounce 6 dwts. of gold per ton. Stope below 340 north, north of east crosscut at 340 south, cut 7 fathoms 5 feet. Lode 6 feet wide, assaying 1 ounce 8 dwts. of gold per ton. Stope south of No. 1 rise cut 12 fathoms 2 feet 3 inches. Lode 3 feet wide, assaying 1 ounce 13 dwts. of gold per ton. Stope above 340 north on fold cut 6 fathoms 3 inches. Lode 3½ feet wide, assaying 1 ounce 13 dwts. of gold per ton. No. 2 stope above 240 north, north of No. 2 south rise cut 10 fathoms 2 feet 6 inches. Lode 2 feet wide, assaying 1 ounce 8 dwts. of gold per ton. No. 2 stope south of No. 1 rise above 240 south cut 11 fathoms 3 feet 9 inches. Lode 6 feet wide, assaying 1 ounce 15 dwts. 8 grains of gold per ton. No. 3 stope south of rise cut 10 fathoms 3 feet 9 inches. Lode 4 feet wide, assaying 1 ounce 13 dwts. 1 grain of gold per ton. Stope north of No. 1 rise cut 9 fathoms 5 feet. Lode 2 feet wide, assaying 1 ounce 9 dwts. 16 grains of gold per ton. Stope on east part of lode at 240 south cut 6 fathoms 5 feet 6 inches. Lode 2½ feet wide, assaying 1 ounce 12 dwts. 20 grains of gold per ton.—Carmichael's shaft. Stope above 540 south of No. 1 rise on east part of lode cut 7 fathoms 9 inches. Lode 7 feet wide, assaying 1 ounce 20 grains of gold per ton. Stope north of No. 2 rise cut 3 fathoms 9 inches. Lode 1 foot 6 inches wide, assaying 1 ounce 10 dwts. 12 grains of gold per ton. Stope below 440 north of south winze cut 2 fathoms. Lode 5½ feet wide, assaying 1 ounce 17 dwts. of gold per ton. Stope south of winze cut 2 fathoms 1 foot 9 inches. Lode 3 feet wide, assaying 2 ounces 2 dwts. 6 grains of gold per ton.—Rowe's shaft. Stope above 315 north of south rise cut 7 fathoms 3 feet 6 inches. Lode 5 feet wide, assaying 1 ounce 13 dwts. 1 grain of gold per ton. Stope south of rise cut 9 fathoms 3 feet 9 inches. Lode 2½ feet wide, assaying 1 ounce 16 dwts. of gold per ton. Stope above 315 north of shaft cut 5 fathoms 1 foot 3 inches. Lode 2 feet wide, assaying 2 ounces 6 dwts. 20 grains of gold per ton. The above stoping is for December month.—Returns. During December month 4855 tons of quartz were stamped, which produced 5988 ounces of gold. 1110 tons of tailings were treated, which produced 269 ounces of gold, making a total yield for the month of 6237 ounces of gold.

GOLD FIELDS OF MYSORE.—Mine report for fortnight ending January 14: South shaft. The 280 feet end north on West Balaghat lode has been driven 11 feet 3 inches, total 171 feet 9 inches. The lode is 3 feet 6 inches wide, chiefly black rock, which is intermixed with stringers of quartz and arsenical pyrites, assaying 2 dwts. of gold per ton. The south level has been lengthened 9 feet 8 inches, making its total length 191 feet 2 inches from crosscut. There is not any change in the character of the lode from that last mentioned, which is of a stratified nature, an assay of which gave 14 dwts. of gold per ton.—Oriental lode. The 280 feet level end north has been driven 19 feet, making its total length 264 feet 8 inches from shaft. The lode formation is 4 feet wide of a mixed nature, assaying 2 dwts. 7 grains of gold per ton. Winze sinking under the level sunk 3 feet 10 inches, total 19 feet 4 inches. The lode is 3 feet wide (quartz), assaying 2 dwts. of gold per ton. Winze in bottom of south level sunk 3 feet 6 inches, total 20 feet. The lode is 1 foot 6 inches wide, of mixed rock and quartz, assaying 3 dwts. 2 grains per ton.—The 380 feet level. No. 1 rise north risen 6 feet, total 74 feet above the level. The lode is 2 feet 6 inches wide, quartz assaying 1 dwts. 3 grains per ton. No. 2 rise has been risen 7 feet, total 91 feet above the level. This rise is following upon the line of the middle shaft, and does not give any quartz to value. Crosscut west has been extended a further distance of 13 feet 6 inches, total 113 feet 6 inches. It has traversed several small veins of quartzose rock, one of which will be opened on hereafter.—The 380 feet level south. No. 1 rise risen 6 feet 4 inches, total 64 feet above the level. The lode is 1 foot 6 inches wide (quartz), assaying 6 dwts. 7 grains of gold per ton.—Stope over the level south of the above rise. Lode 6 feet wide (quartz), assaying 5 dwts. 2 grains per ton.—The 470 feet level. Raising the roof of level. This has been finished up to the end, and the men are now employed in cutting ground near the shaft for fixing a small engine.—Sinking of shaft. Sunk 2 feet 8 inches, total 16 feet 6 inches, under the 470 feet level. The lode is 6 feet wide, carrying 2 feet 6 inches of quartz, the assay value being 1 ounce 3 dwts. 8 grains per ton.—Middle shaft. Cutting of ground for a fork has been finished. The masons are now cementing the same to keep the water from going down.—Prospecting shaft in Golconda block sunk 2 feet 4 inches, total 71 feet. The bottom of the shaft is now in a mass of arsenical pyrites, an assay of which gave 15 grains of gold per ton. I cannot as yet say what it is, but I am of opinion that it will form into a lode when sunk on deeper.—Ajjapalli block. Fair progress is being made in cutting down and timbering of the shaft.

OOREGUM.—Superintendent's report for fortnight ending January 14: Taylor's shaft sunk 7 feet, depth below the 860 feet level 46 feet. Lode 6 inches wide, assay value 14 dwts. 17 grains. The 860 feet level south driven 24 feet 6 inches, total 49 feet 6 inches. Lode 1 foot wide, assay value 2 ounces 6 grains. The 760 feet level south driven 16 feet 6 inches, total 492 feet 6 inches. The lode being very small, a mere streak, we thought it advisable to crosscut west to ascertain whether the main part may be standing in that direction. Crosscut extended 16 feet. If a few feet more reveals nothing, we shall start a crosscut east to prove the ground in that direction also. No. 1 winze 760 feet level south sunk 5 feet, total 67 feet. Lode 1 foot 6 inches wide, assay value 8 dwts. 17 grains. No. 2 winze 760 feet level south sunk 3 feet 3 inches, total 55 feet. Lode 2 feet 6 inches wide, assay value 2 ounces 5 dwts. 17 grains. No. 3 winze 760 feet level south sunk 3 feet 3 inches, total 19 feet. Lode 1 foot wide, assay value 3 ounces 9 dwts. 16 grains. No. 2 rise 760 feet level south risen 6 feet 6 inches, total 58 feet 6 inches. Lode 1 foot 9 inches wide, assay value 2 ounces 17 dwts. 16 grains. Communicated with No. 2 winze from 660 feet level south, the 660 feet level south driven 15 feet, total 526 feet 6 inches. Lode 9 inches wide, assay value 2 ounces 3 dwts. 15 grains. No. 2 winze 660 feet level south sunk 2 feet, total 61 feet 3 inches. Lode 6 inches wide, assay value 8 dwts. 17 grains. No. 3 rise 660 feet level south sunk 1 foot 9 inches, total 33 feet 9 inches. Lode 6 inches wide, assay value 19 dwts. 15 grains.—Wallroth's shaft sunk 14 feet 9 inches, total depth 1144 feet 9 inches. No change in character of lode, small and of no value. The 1060 feet level south driven 16 feet 9 inches, total 181 feet 6 inches. Lode small; no sample. No. 1 winze 1060 feet level south sunk 4 feet 6 inches, total 12 feet. Lode also small; no sample. The 1060 feet level north driven 11 feet 6 inches, total 142 feet 6 inches. Lode 6 inches wide, assay value 8 dwts. 17 grains. No. 1 winze 1060 feet level north sunk 6 feet 6 inches, total 17 feet. Lode pinched; no sample. No. 1 rise 1060 feet level north risen 9 feet, total 22 feet 3 inches. Lode 4 feet wide, assay value 6 dwts. 12 grains. Communicated with No. 1 winze from 960 level north. The 960 feet level south driven 25 feet 6 inches, total 632 feet. Lode 6 inches wide; no sample. No. 2 winze 960 feet level south sunk 5 feet 9 inches, total 59 feet 9 inches. Lode 6 inches wide, assay value 5 dwts. 10 grains. No. 3 winze 960 feet level south sunk 4 feet, total 9 feet 9 inches. Lode small, no sample. No. 1 winze 960 feet level north sunk 3 feet, total 65 feet 9 inches. Lode 4 feet, assay value 4 dwts. 8 grains. Communicated with No. 1 rise 1060 feet level north. The 860 feet

level south driven 29 feet 6 inches, total 964 feet. Lode 4 inches wide. No sample. No. 3 winze 860 feet level south sunk 1 foot 9 inches, total 98 feet 6 inches. Lode 1 foot wide, assay value 9 dwts. 19 grains. Communicated with 960 feet level south. No. 4 winze 860 feet level south sunk 6 feet, total 80 feet 6 inches. Lode 1 foot 6 inches wide, assay value 4 dwts. 8 grains. No. 5 winze 860 feet level south sunk 4 feet 6 inches, total 8 feet 6 inches. Lode 6 inches wide, assay value 6 dwts. 12 grains. No. 3 winze 760 feet level south sunk 4 feet 6 inches, total 95 feet 6 inches. Lode 1 foot 6 inches wide, assay value 3 dwts. 6 grains. Communicated with 860 feet level south. No. 6 winze 760 feet level south sunk 7 feet 9 inches, total 63 feet 9 inches. Lode 9 inches wide, assay value 5 dwts. 10 grains. No. 2a rise 760 feet level south risen 6 feet 6 inches, total 81 feet 6 inches. Lode 2 feet wide, assay value 9 dwts. Communicated with No. 6 winze, 660 feet level south. No. 6 winze 660 feet level south sunk 1 foot, total 28 feet. Lode 2 feet wide, assay value 9 dwts. 20 grains. Communicated with No. 2a rise 760 feet level south. No. 1 winze level north from crosscut east 460 feet level south sunk 5 feet 3 inches, total 28 feet. Lode 2 feet 6 inches wide, assay value 10 dwts. 21 grains. No. 1 rise level north from crosscut east commenced risen 16 feet. Lode 9 inches wide, assay value 3 dwts. 6 grains.—Low's shaft. 810 feet level south commenced and driven 9 feet. The 710 feet level south driven 15 feet, total 212 feet. Lode 2 feet wide, assay value 5 dwts. 10 grains. No. 1 winze 710 feet level south sunk 5 feet, total 56 feet. Lode 4 feet wide, assay value 8 dwts. 18 grains. No. 1 winze 710 feet level south driven north on lode from point of intersection, sunk 3 feet, total 32 feet 9 inches. Lode 1 foot 4 inches wide, assay value 9 dwts. 20 grains. No. 1 rise 710 feet level south driven north on lode from point of intersection, risen 10 feet 6 inches, total 21 feet. Lode 1 foot 6 inches wide, assay value 4 dwts. 8 grains.—Probyn's shaft. The crosscut east 1150 feet level north driven 9 feet, total 60 feet 6 inches. In the end a branch of quartz has been intersected 4 inches wide, and gave by assay 2 dwts. 4 grains of gold per ton. The crosscut is being continued a few feet more for further proof. The level east of south 1050 feet level south driven 9 feet 6 inches. Total 98 feet. Lode 6 inches wide, assay value 4 dwts. 10 grains. No. 1 winze 1050 feet level north sunk 4 feet, total 94 feet 6 inches. Lode 3 inches wide, assay value 3 dwts. 6 grains. No. 1 winze 950 feet level south sunk 2 feet, total 113 feet 9 inches. Lode 6 inches wide, assay value 2 dwts. 10 grains. Communicated with 1050 feet level east of south. No. 4 rise 550 feet level south risen 2 feet 6 inches, total 44 feet. Lode small; no sample. Suspended. Throughout the mine there are 70 stopes being wrought on, which are yielding quartz of the average quality. During the month of December we crushed 4785 tons of quartz, which produced 4968 ounces of gold, in addition to this 4784 tons of tailings were treated which yielded 1240 ounces of gold. Total return 6208 ounces of gold.

OURO PRETO.—Passagem Mine report for December: Iroline shaft No. 1 was sunk 330 metres, and continues in compact quartzite, 505 end north-east was driven 330 metres. A branch of ore is holding along against the roof, but lower part of end is in quartzite. 505 end south-west was driven 160 metres in schist, carrying irregular lines of ore. 470 end north-east was driven 360 metres, and continues full size in strong massive quartz lode with pyritic lines throughout. Crosscut at 470 north-east was driven 210 metres in footwall schist. 470 end north from No. 2 shaft was driven 630 metres in schist without ore at present. 470 end south-west from No. 2 shaft was driven 470 metres. It carries a bar of quartzite across the middle of the end, with quartz over and below. 435 end north-east was driven 230 metres in mixed lode of quartzite, with interstratified veins of quartz and pyritic ore. 435 end south-west was driven 1 metre in quartzite, carrying irregular branches of quartz. End under 435 south-west from No. 2 shaft was driven 140 metres full size in quartz containing little pyrites. 400 end north-east was driven 1 metre. The lode is composed chiefly of quartzite, with at present only a small branch of quartz. Crosscut at 400 north-east was driven 260 metres. The quartz has risen into the roof again, and the breast is in quartzite. 365 end north-east was driven 340 metres into hard quartzite. Crosscut at 365 south-east was driven 330 metres. The upper part of the level is still in quartzite, but lower half is in footwall schist. Rise at 365 south-west has been started to make communication on line of rise 365. It was advanced 470 metres in schist carrying small lines of quartz. 315 end north-east was driven 210 metres in mixed lode and quartzite, with patches of quartz. Winze at 315 north-east has been commenced from bottom of Baraco Secco stope to hole to crosscut from 365, and thus facilitate the removal of a large body of ore still standing under the 315 level. It was sunk 180 metres in footwall schist. Rise over 315 north-east was advanced 090 metre, the men being employed chiefly in making a level cut in bottom of rise for fixing tip shoot. 315 end south-west was driven 340 metres, full size in quartz carrying irregular lines of quartzite. 215 end north-east was driven 230 metres, full size in strong quartz lode, carrying patches of pyrites throughout.—Stoping. The stopes at the 435 level show no change, the lode maintaining its size, and being composed of clean milling ore throughout. One end of the inner stope has been communicated to winze from 400 level, so that we are now able to bring down the attle required to fill the excavation, which at this point is 10 metres from hanging to footwall. Over the 400 level between shafts stoping has been carried on around rise 45, and though the ground remaining is small in extent, as the lode is over 6 metres thick, it will still yield a good quantity of ore. The continuation of No. 4 stope over the 365 has got into poor ground, the lode being mostly quartzite with only a small branch of ore against the hanging wall. South-west at the 400 level the stopes continue in strong lode about 4 metres thick, carrying good patches of pyrites, though in places somewhat mixed with quartzite and schist.—North-east of No. 2 shaft. At this level the lode is 6 metres thick, but the ore is split by a thick bar of quartzite into two distinct branches, one against the hanging and the other against the footwall, and it would appear that the latter branch is the lower lode worked at the 365 level. At the 365 north-east the lode in stope has increased to 4 metres thickness, but is still of low grade. The stopes from 365 near shaft which have communicated to 315 level south-west are being carried across the level on ore against the footwall. This is about 3 metres thick, and is standing over a considerable area under the poor ground found against the hanging wall. The inner stopes at 365 south-west continue on a very regular body of lode 3 metres thick, carrying patches of pyrites and tourmaline ore throughout. At the 315 north-east the ore in Baraco Secco shoot has been taken out in the deepest point to the foot wall, about 8 metres below the level, but there is a good deal to be removed over the bottom of excavation, before a pillar can be built. The quartz carries a good deal of pyrites and is of very good yield. At the 315 south-west two stopes are being worked, in lode averaging nearly 5 metres thick. The quartz carries a fair amount of pyrites, but is broken up by interstratified lines of schist, which occur throughout the lode. Stopping on the pillar of ground under 265 south-west is being continued, and though the ore is considerably mixed with quartzite the lode carries good patches of quartz and pyrites. Over the 235 level the stopes are in lode 3 metres thick carrying good pyritic ore, but the ground is partially decomposed and progress is slow on account of care required to secure the roof. At the 215 north-east the outer stope continues in strong compact quartz lode, and in the inner stope though it still carries a large amount of quartzite quartz is increasing in size.—(Signed) Henry J. Gifford.

NO. 7 NORTH-EAST QUEEN.—The following fortnightly report has been received from the mine, dated Charters Towers, Dec. 20: Hamilton and party are at present crashing at the New Queen mill a parcel of about 17 tons, and expect to clean up about Monday next. Balch and party below No. 2 level east have about 8 inches of stone in the face of the drive at present and from 10 to 15 inches in the stope. Ferguson and party are still rising at the back of No. 3 level and have about 15 inches of stone. Wherry and party have still about 20 to 24 inches of stone of good quality in their stope, and about 9 tons broken below. Jordan and party have but very little stone worth saving just now, the bulk being of very poor quality. We have hauled about 16 tons of quartz for the fortnight.—(Signed) John T. Williams.

THE CORNISH MINE SHARE MARKET.

THE CORNISH MINES

Mr. MICHAEL WILLIAMS BAWDEN, Mining and Assaying Office, Liskeard, Cornwall, writes (February 6):—The mining market is without any change. There is a little more confidence in the future of the output although the stocks for the past month show an increase, prospectively although the stocks for the past month show an increase of 200 tons. Quotations much the same:—Basset United (fully paid), 1 to 1½; Carn Brea, ½ to ¾; Devon Consols, 20s. to 21s. 6d.; Do's, 1 to 1½; Carn Brea, ½ to ¾; ditto (partly paid), 4s. 3s. to 4s. 9d.; East Pool, 2½ to 2¾; Killifreth, 6s. to 6s. 6d.; Levant, 3½ to 4s. 9d.; Polberro, 9s. to 10s. 6d.; Tincroft, 1 to 1½; West Frances, 4 to 4½; West Kitty, 3 to 3½; Wheal Grenville, 7½ to 7¾; Wheal Kitty, 4 to 4½.

MANCHESTER.
Messrs. JOSEPH R. and W. P. BAINES, Stock and Share Brokers,
Queen's Chambers, 7, Market-street, write, February 6 (noon):—
The markets throughout the week have been buoyant all round, and
though there have been a few back-sets now and then on profit-
taking, still rails have an almost unbroken accord of enhanced
values on the week. Home railway traffics have favourably affected
prices in that department, whilst the growing feeling of confidence
in the state of affairs in the United States (culminating in the large
over-application for the Bond issue) has given continuous strength
to that section. Canadians have been similarly influenced to the
last-named, and have moved in concert therewith. In American
this morning's opening prices are mainly at the top points of the
week, but the same cannot be said of Canadians or of
home rails, the last falling away somewhat yesterday after-
noon on rumours of further labour trouble in the ship-
building trades. Incidents have occurred which can only be properly
described in daily details to which we now refer. Friday
found home rails firm, whilst Americans were better at the opening,
but did not maintain best figures to the finish. Trunk issues were
enquired for, and marked some fair advances. Pacifics also moved
rather over \$1 up. Mexicans neglected. On Saturday home rails
maintained their strength, with Chathams and Brighton A feature
an advance. Canadians a little better regarding Grand Trunk
whilst Pacifics were hardly mentioned. Americans steady all
Monday found the position of prices without much change,
few alterations (whilst small) being on the better side. The pas-
sage of the Silver Bill by the American Senate was thought little of,
not expected to pass into law. The day may be said to have
finished a lull as regards changes in quotations, though a fair busi-
ness was reported at about late rates in all departments. On Tues-
day the level of prices was left pretty much as on previous days,
changes being but fractional, these, however, being again on
a side favourable to holders. Good investment stocks and
generally well enquired for. Yesterday Great Westerns im-
proved, but the rest of home rails were from New York, did not ho-
withstanding the better figures from Mexicans or Canadians.
best prices quite. Nothing special in Americans, and about the
morning opened distinctly better for Americans, and about the
for home rails. Consols have mended $\frac{1}{4}$ on the week. Miscella-
neous generally better.

from	for home rails. Consols have
895.	as will be seen below, are very generally better.
100.	CONSOLS.—Higher: Two and Three-Quarter per Cent., $\frac{1}{2}$.
fine.	COLONIAL STOCKS, &c.—Higher: Canada Registered, 1; New
823	South Wales Inscribed, $\frac{1}{2}$; Victoria Inscribed, $1\frac{1}{2}$.
6,922	CORPORATION STOCKS AND DEBENTURES.—Higher: Birming-
724	ham Three and a-Half per Cent., 1; Birmingham Three per Cent., $\frac{1}{2}$;
438	Dewsbury Three and a-Half per Cent., 2; Glasgow Three and a-Half
8,989	per Cent., 1 to 2; Liverpool Three and a-Half per Cent., $\frac{1}{2}$; Man-
415	chester Four per Cent., $\frac{1}{2}$ to 1; Manchester Three per Cent., $\frac{1}{2}$; Not-
515	tingham Three per Cent., 1.
70	FOREIGNERS.—Higher: Argentine Six per Cent., $1\frac{1}{2}$ to 2; Ar-
1,000	gentine Five per Cent., $\frac{1}{2}$; Brazilian Four and a-Half per Cent., 1;
9,969	Brazilian Four per Cent., 1 to $1\frac{1}{2}$; Mexican Six per Cent., $2\frac{1}{2}$; Portu-
10,758	guese Three per Cent., $\frac{1}{2}$; Spanish Four per Cent., $\frac{1}{2}$; Turks "D," $\frac{1}{2}$;
	Uruguay Three and a-Half per Cent., $\frac{1}{2}$.—Lower: Italian Rentes, $\frac{1}{2}$;
	Russian Four per Cent., $\frac{1}{2}$.
	BANKS.—Higher: Adelphi, $\frac{1}{2}$; Imperial Ottoman, $\frac{1}{2}$; London and
	Midland, $\frac{1}{2}$; Manchester and Liverpool District, $\frac{1}{2}$; Mercantile of
	Lancashire, $\frac{1}{2}$; National Provincial, $\frac{1}{2}$; Parr's, $\frac{1}{2}$; W. D., and Man-
	chester and Salford, $\frac{1}{2}$.
	Insurance and Steam Power, $\frac{1}{2}$;

Lancashire, & National Fire Insurance Co., Ltd.,
 Manchester and Salford, &
 INSURANCE.—Higher: Boiler Insurance and Steam Power, &
 British and Foreign Marine, & Commercial Union, & Gardiner
 Fire, & Lancashire, & Liverpool, London, and Globe, & Marine
 time, & Royal, & Sea, 1-16; Union Marine, 5-16.—Lower:
 Reliance Marine, 1-16.
 COAL, IRON, &c.—Higher: Ashberry, & Bolckow, Vaughan
 (fully paid), & ditto (£12 paid), & to 5-16; John Browns, &
 Cammells, & Dorman Long, & Ebbw Vale Steel, & Andrew
 Sheepbridge A, &
 Anglo-American

[illegible]

LATER (4 P.M.).—Dividend announcements to-day have helped home rail prices much generally. London and Northern Westerns are exceptionally better, and Lancashire and Yorkshire and Midlands to a small extent. Otherwise prices are, as a rule, easier. Americans opened strong, but have not kept best figures.

18, 1896.
cash and }
3 months }
to 7a. 3d.

SCOTCH MINING AND INDUSTRIAL COMPANIES
SHARE MARKETS.

SCOTCH MINING AND
SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, Stockbroker and Ironb
(February 6), writes:—During the past week there has be
moderate amount of foreign business done, and prices are improv
quieter state of foreign politics and good trade prospects. The
state of the Money Market, and of shares.
... would also help prices of shares. ... prices are in

state of the Money Market, and metal, should also help prices of shares.

In shares of coal, iron, and steel companies prices are in cases lower. Addie Preference have declined on passing interest. Fifeshire Main Preference are offered at 7s. 63. Cairn unaltered at 51s; the output last month was 1431 tons. Cairn Gas Coal are at 9s; and Steel Company are higher in sympathy.

In shares of copper concerns prices. The meeting of the Arizona will the market for the metal. The meeting of the Arizona will the market for the metal. The meeting of the Arizona will the market for the metal.

The market for the month has been very quiet. Arizona have touched 49s. 3d.; Tinto, 57s. 6d.; Tinto, 18s; and Tharsis, 5s; but are all at realisation.

In shares of gold and silver mines there has been more doing. The arrival of Mr. Rhodes in this country has helped buying. Chartered have improved to 77s. 6d., Consolidated 10-16s, East Rand to 6s, and Randfontein to 59s. 6d. Indian prospecting shares are also better. Mysore, on dividend prospects, has risen to 10s. 6d.

1900-1901	41	5	0	buying.
1901-1902	45	0	0	10-16, East Rand to 6, and Kanorovon.
1902-1903	41	5	0	are also better, especially Mysore, on dividend prospects.
1903-1904	41	5	0	increased amount of business has been done in
1904-1905	41	5	0	Australians on anticipation of a speedy announcement.
1905-1906	41	5	0	Afrikaner also at 23s. 3d.; African Land
1906-1907	41	5	0	crushings. Broken Hill, 1s. 6d.; Black Flag, 20s.; Bonanza
1907-1908	41	5	0	Australian Broken Hill, 1s. 6d.; Balkis Ererstelling, 3s. 6d.; Bona
1908-1909	41	5	0	16s.; Big Blow, 13s. 9d.; Broken Hill, 20s.; Cressus,
1909-1910	41	5	0	Bayley's Reward, 6s. 6d.; 26s. 3d.; Colenbarnd, 16s. 3
1910-1911	41	5	0	Central Exploration, W.A., 26s. 3d.; Suburban, 37s. 6d.; Door
1911-1912	41	5	0	gardie Sherlows, 20s.; 12s. and Suburban, 37s. 6d.; Door
1912-1913	41	5	0	Eastleigh, 20s.; East Nigel, 12s.; Gravel, 3s.; Golden Crow
1913-1914	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Gold Coast Dev
1914-1915	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1915-1916	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1916-1917	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1917-1918	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1918-1919	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1919-1920	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1920-1921	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1921-1922	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1922-1923	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1923-1924	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1924-1925	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1925-1926	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1926-1927	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1927-1928	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1928-1929	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1929-1930	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1930-1931	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1931-1932	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1932-1933	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1933-1934	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1934-1935	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1935-1936	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1936-1937	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1937-1938	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1938-1939	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1939-1940	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1940-1941	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1941-1942	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1942-1943	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1943-1944	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1944-1945	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1945-1946	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1946-1947	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1947-1948	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1948-1949	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1949-1950	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1950-1951	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1951-1952	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1952-1953	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1953-1954	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle
1954-1955	41	5	0	Gold Fields of Mozambique, 36s. 3d.; Hauraki, 9s.; Holcomb Valle

79, Gracechurch-
Gold Fields of Mozambique
3s. 9d.; Hilt or Miss, 30s.; Hauraki, 9s.; Holcomb



Chartered from December 31 to January 30 of the following year	550	2,262	1,000	1,350	1,850	2,103
	26,739	22,510	23,651	22,698	23,089	24,245 tons
Blocks of Copper (tons fine)	Feb. 1, 1891.	Feb. 1, 1892.	Feb. 1, 1893.	Feb. 1, 1894.	Feb. 1, 1895.	Feb. 1, 1896.
	18,001	23,403	31,688	30,000	30,000	30,000
Chilian in Liverpool and Swansea	17,858	6,390	4,713	1,000	1,000	1,000
in France	2,143	2,000	4,426	2,000	2,000	2,000

	Ditto in France	.....	3,293	.....	1,246	.....
837 279	English G.M.C. in Liverpool and Swansea	.....	2,733	.....	.....	.....
	Total .....	.....	58,013	.....	58,082	.....
		Feb. 1,		Dec. 1,		Jan. 1,
		1855.		1856.		1857.
		37,270		37,346		37,517
		197		525		353
46,128	Chilian in Liverpool and Swansea					
46,018	Chilian in France					916
	American in Liverpool and American in London	4,254	870	803	852	.....

Tons fine.	Total.....	51,048	42,481	42,917
1952.	Afloat as advised by mail cable to date.....	Feb. 1,	Feb. 1,	Feb. 1,
		1891.	1892.	1893.
2,156		1,965	2,285	3,040
	From Ohlil	590	400	650
2,809	From Australia	80,418	57,687	58,447
1887.	Total visible supply	Feb. 1,	Dec. 1,	Jan. 1,
				1896.

	1891.	1892.	1893.	1894.	1895.
	Tons	Tons	Tons	Tons	Tons
	fine.	fine.	fine.	fine.	fine.
Chill into Liverpool	1,105	1,875	1,603	1,867	1,481
and Swansea					
"Other Countries into	5,338	4,599	5,110	6,109	6,371
" "				280	225

Chili ditto	173	77	...	...	...
America ditto	134	12	...	355	100
Mexico ditto	134	12	...	...	...
Other countries ditto	873	763	1,745	1,098	...
.....	8,748	8,309	9,310	9,975	...
Deliveries ditto in England and France	12,242	5,891	8,618	9,068	...

18,000 tons, valued at \$44 and \$41.84, and three months, up to \$44 and \$41.84, with buyers at 23, 63, and 64 cents per lb. American quotations for No. 1, No. 2, and No. 3, are 23, 24, and 25 cents per lb. The *Hankow* market has risen from 9-75 cents to 10-00 cents and 501 tons of copper have been sold to the *Hankow* on 30th ult. The cargo was sold to arrive on private terms on the 30th ult. and is being delivered locally delivered. The total amount of copper delivered to the *Hankow* is 42,123 tons, against 41,515 tons in 1901. The *Hankow* market is 210 tons for the month of Feb., showing an increase of 210 tons for the month of Jan. The *Hankow* market is 999 tons, making a total of 4,000 tons of copper sold, but not yet delivered.

77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87
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300	Obili bars.....	{ 40 3s. 6d. cash and 40 10s. 0d. 3 months	...	{ 40
300	" Ores.....	7s. 5d. to 7s. 6d.	...	
300	" Regulus or matte.....	7s. 3d. to 8s. 0d.	...	
300	" Precipitate.....	8s. 0d. to 8s. 3d.	...	
350	Arrivals here during the fortnight of Obilian and Bores, Regulus			
	Iberia (s), from Obili			

[illegible]

very active for some time, and now realises 4½ per cent. Lake copper is quoted at 100, and shows much inclination to be exceptionally large, and considerably below the parity of 8500 tons last year, and then during the same season for the month have

Stock of Chili copper and to date

Stock of foreign copper in London 1557

Ox and after the 5th inst. the offices of the Loan and Finance Company (Limited), will be in the new building in the street, E.C.

...ance for the media. Dave ...

Other copper at Liverpool & Swansea	350	285	837	...	...
English copper at Liverpool and Swansea	60	110	279	...	...
American copper in France					
Other copper in France					
Tons fine copper during the fortnight	6,814	6,404	42,128	4,000	...
Against tons on January 17, 1898	3,355	4,354	41,918	4,100	...
Against tons on January 17, 1898	5,045	4,439	42,917	2,900	...

	Price of United States gold coin	Tons fine.	Tons fine.	Tons fine.	Total fine.
	\$48 17s. 6d., \$17 12s. 6d., \$75 15s., &c.	1896.	1895.	1894.	1893.
Imports from Chili and Bolivia from January 1 to date.....		1,938 ...	1,485 ...	2,167 ...	1,877 ...
Imports from America from January 1 to date.....		3,713 ...	4,626 ...	4,921 ...	3,268 ...
		1891.	1890.	1889.	1888.
Imports from Chili and Bolivia			3,474 ...	2,870 ...	2,642 ...

At Swansea—Nil.	277	43	—
At Liverpool—	175	150	—
Basis (s), from Valparaiso, &c...	452	193	—
In France—	—	—	—
Canova (s)	—	—	—
Tons	41	837	75
Imported of 1898	—	—	—

At Swansea	10	*****	*****	205	*****	310	*****
Liverpool	10	*****	*****	205	*****	310	*****
In France	*****	*****	*****	*****	*****	*****	*****
	10	*****	*****	35,088	*****	559	*****
Representing about 35,689 tons fine copper against				36,836 tons on			
				February 1,			
	38,262	10	10		10	10	10
31,908	10	10	10		10	10	10
36,915	10	10	10		10	10	10
34,783	10	10	10		10	10	10

Great copper may be estimated from the following

Against same		1894	1895	1896	1897
		31,515	36,915	36,915	3,100
		1883	36,915	36,915	2,000
		1892	36,783		

Quotations for West Coast copper are as follows:—		Feb. 2, 1894	Feb. 2, 1895	Feb. 2, 1896	Feb. 2, 1897
	To-day.	1895	1894		
Ores	8/ to 8/6	5/9	7/10 3/4	9/	
Regulus ...			241 5/	245 10/	
Bars	243 17/8	240			249 15/
		Now	about 245		

#23 17s. 6d. cash in hand and forward. Tin quiet. #24 15s. English about
 #26 10s. to 12s. 7d. cash. #27 10s. 6d. cash. #28 10s. 6d. cash. #29 10s. 6d. cash.
 #30 10s. 6d. cash. #31 10s. 6d. cash. #32 10s. 6d. cash. #33 10s. 6d. cash.
 #34 10s. 6d. cash. #35 10s. 6d. cash. #36 10s. 6d. cash. #37 10s. 6d. cash.
 #38 10s. 6d. cash. #39 10s. 6d. cash. #40 10s. 6d. cash. #41 10s. 6d. cash.
 #42 10s. 6d. cash. #43 10s. 6d. cash. #44 10s. 6d. cash. #45 10s. 6d. cash.
 #46 10s. 6d. cash. #47 10s. 6d. cash. #48 10s. 6d. cash. #49 10s. 6d. cash.
 #50 10s. 6d. cash. #51 10s. 6d. cash. #52 10s. 6d. cash. #53 10s. 6d. cash.
 #54 10s. 6d. cash. #55 10s. 6d. cash. #56 10s. 6d. cash. #57 10s. 6d. cash.
 #58 10s. 6d. cash. #59 10s. 6d. cash. #60 10s. 6d. cash. #61 10s. 6d. cash.
 #62 10s. 6d. cash. #63 10s. 6d. cash. #64 10s. 6d. cash. #65 10s. 6d. cash.
 #66 10s. 6d. cash. #67 10s. 6d. cash. #68 10s. 6d. cash. #69 10s. 6d. cash.
 #70 10s. 6d. cash. #71 10s. 6d. cash. #72 10s. 6d. cash. #73 10s. 6d. cash.
 #74 10s. 6d. cash. #75 10s. 6d. cash. #76 10s. 6d. cash. #77 10s. 6d. cash.
 #78 10s. 6d. cash. #79 10s. 6d. cash. #80 10s. 6d. cash. #81 10s. 6d. cash.
 #82 10s. 6d. cash. #83 10s. 6d. cash. #84 10s. 6d. cash. #85 10s. 6d. cash.
 #86 10s. 6d. cash. #87 10s. 6d. cash. #88 10s. 6d. cash. #89 10s. 6d. cash.
 #90 10s. 6d. cash. #91 10s. 6d. cash. #92 10s. 6d. cash. #93 10s. 6d. cash.
 #94 10s. 6d. cash. #95 10s. 6d. cash. #96 10s. 6d. cash. #97 10s. 6d. cash.
 #98 10s. 6d. cash. #99 10s. 6d. cash. #100 10s. 6d. cash.

Less sales.....	—	—	—
Present stock of Chili being...	10	—	—
American	10	430	—
Italian	—	—	—
Total unsold at Swansea ...	—	430	—

The *Hawke* had
 Equivalent to about 391 tons in fine copper. The *Hawke* had
 3th ult. with 2299 tons of Bolso waste and 501 tons of bars
 Swansea smelters on private terms. Chili Charters for 700
 tons at 140c tons, and for the second lot 700
 tons at 48 1/2c.

£42 18s. 6d. to **£43 17s. 6d.**—A large business was done, about the 27th to the 31st, at which time it was stated that there is a large consignment of hands on the Continent.

Messrs. JAMES LEWIS and SON'S Monthly Report on Copper, February 3, says 1—Copper. Large purchases have been made for the purpose of advancing the share of copper, made for the purpose of advancing the share of copper, followed by considerable advance on the part of factories, has caused an advance of £2 7s. 6d. per ton since the price had fallen to £40 10s. for cash—from £47 6d. to £43 17s. 6d. for cash, and £4 5s. for the 31st,

for home consumption. Best selected in Birmingham months is come. In New York, in New York more than Lake ingots in New York. In New York 10 to 15¢ cents per lb. Producers of electrolytic do not sell, although the stock they hold are believed to be the value of the quality of copper having fallen considerably. American shipments for the month are about 1,000 tons, and deliveries 1172 tons greater in period last year. The total arrivals in England and France

period two years

Kirkcaldy, 15s. 6d.; Kapanga, 9s.; Lindsay's, 10s.; Lion, 12s. 6d.; Mysore West, 23s. 9d.; Mallina, 4s.; Murchison New Oum, 19s.; Murchison Gold Fields, 7s.; New Pictou, 6s.; Otter Kopje, 1s. 6d.; Oceana, 35s.; Ouro Preto, 28s. 3d.; Orion, 58s. 9d.; Paddington, 27s. 6d.; Spitzkop, 16s.; South Londonderry, 3s. 9d.; Sheba, 31s. 3d.; St. Augustine, 13s. 6d.; Stanhope, 22s. 6d.; Tiger, 11s. 3d.; Westralia, 24s. 6d.; Wolverd, 51s. 3d.; West Australian Gold Concessions, 47s. 6d.; West Australian Mining, 9s. 3d.; and Westworth, 20s. 6d.

In shares of miscellaneous companies prices are generally better, but oil companies shares are flat, owing to further reduction in the price of candles. Broxburn are at 10, Pumpherton 7½, and Young's Oil 29s. Killaloe Slate are at 4s. 6½, London and Glasgow Engineering 30s., and Nobel's Explosives 15s.

EDINBURGH.

Messrs. THOMAS MILLER and SONS, Stock and Share Brokers, 69, Hanover-street, Edinburgh, report as follows under date of February 6:—The railway market has shown great firmness during the past week, and a considerable amount of business has been done. The highest prices, however, have not been maintained. Caledonian has risen from 151½ to 153, the Deferred from 56 to 56½, Glasgow and South-Western from 117½ to 119½. North British has declined from 46½ to 46, Great North of Scotland from 112½ to 112, Highland from 109 to 108½. Chatham, after being very good, has somewhat suddenly given way, and closes at a decline of 3-16. Insurance shares have been very good. Caledonian have advanced from 27 to 27½, North British and Mercantile from 39½ to 40½, Northern from 69½ to 71, Edinburgh Life from 54½ to 55½, Guardian from 10 to 10½, Liverpool, London, and Globe from 49 to 50½, London and Lancashire from 18 to 18½, Standard Life from 64½ to 66½, British and Foreign Marine from 23½ to 24½. Thames and Mersey Marine have declined from 11 11-16 to 11½. In Banks, Clydesdale have improved from 20½ to 20¾, Commercial from 73 to 73½, National from 345 to 346, Union from 21½ to 21 9-16. British South Africa shares have advanced from 71½ to 75s. 6d. Realisation and Debenture Corporation have fallen from 6s. 6d. to 3s. Stock Conversions are up from 18s. to 19s. Fifeshire Main Colliery Preference have gone from 12s. 6d. to 5s. Steels from 95s. 3d. to 95s. Tharsis have improved from 99s. 6d. to 101s. Consolidated Gold Fields up from 9½ to 10 9-16, De Beers from 24½ to 26. Prairie Cattle shares have risen from 17s. 6d. to 23s.

SOCIETY OF ENGINEERS.

THE first ordinary meeting of the Society of Engineers for the present year was held on Monday evening, February 3, at the Royal United Service Institution, Whitehall. Mr. WILLIAM GEORGE PIERCE, the President for 1895, occupied the chair, and presented the premiums awarded for papers read during that year, viz.:—The President's gold medal to Mr. R. E. Middleton for his paper on "The Relative Value of Percussion Gauges." The "Bessemer Premium" to Mr. Thomas Andrews, F.R.S., for his paper on "The Effect of Strain on Railway Axles and the Minimum Flexion Resistance Point in Axles." The "Rawlinson Premium" to Mr. D. B. Butler for his paper on "Portland Cement: Some Points in its Testing, Uses, and Abuse," and a "Society's Premium" to Mr. W. T. Sugg for his paper on "Ventilation and Warming."

Mr. PIERCE introduced the President for the present year, Mr. Samuel Herbert Cox, to the meeting, and retired from the chair, receiving a hearty and unanimous vote of thanks for his services during the past year.

Mr. Cox, having thanked the members for electing him as President, reviewed briefly the present position of the society, and alluded to the arrangements which had been made for holding the ordinary meetings of the society in the theatre of the United Service Institution.

He then referred to the vacation visits which had been paid to the Waterloo and City Railway Works, the New City of London Brewery, the Outer Harbour Extension Works at Dover, the Admiralty Pier and Inner Harbour at Dover, the Dover Electricity Supply Company's Station and the School of Gunnery and New Experimental Ranges at Shoeburyness, and expressed the thanks of the society to those gentlemen who had so kindly acted as guides, and afforded the members every information regarding the important works in question.

The remainder of his address was devoted to a review of the gold mining industry from an engineering point of view, and the developments and improvements in systems of treatment which had been brought about since the discoveries of gold in large quantities in California in 1848.

He reviewed the development in alluvial mining from those simple processes carried on by individual miners who, with no more appliances than a tin dish, "cradles" or "toms," in many cases succeeded in amassing considerable sums of money, to the methods of hydraulic mining by which gravels of exceedingly low grade were made to yield very profitable returns, and also gave some interesting details regarding working deposits of this class, in which no dumping ground being available, the whole of the gravel had to be elevated by mechanical means. Some allusions were made to the quantity of water which was necessary to deal with deposits of this class and the pressure under which it was necessary that it should be brought on to the ground.

Passing from this branch of the subject to quartz mining, he alluded to the differences which exist between free milling and refractory ores, and sub-divided the free milling ores into those in which the gold was coarse and those in which it was very fine, pointing out the different systems of treatment which had been adopted under varying conditions.

The systems of crushing and concentration were mentioned, and some remarks made upon the crushing battery of the present day, as compared with those which were employed 20 or 30 years ago, and the systems adopted of dry crushing were also referred to.

The difficulties of a dry treatment of gold-bearing ores was also explained, and the President urged upon members of the society the necessity which existed for a new process which would be applicable in those districts in which sufficient water could not be obtained to allow of ordinary battery treatment being employed.

Some remarks were offered regarding roasting ores which were not susceptible to treatment without undergoing this operation, and a brief description was given of the chlorination and cyanide processes as applied during the present decade. The Sulman-Tied process for using bromide of cyanogen in conjunction with potassium cyanide was also described, and a hope expressed that before the close of the present year some very successful results would be achieved by it.

The address was concluded by some pertinent remarks regarding the conditions under which mines were worked, and the necessity of thoroughly studying the conditions which prevail before deciding what working capital was necessary to bring a mine to a successful issue.

It was unanimously resolved, upon the proposition of the President (Mr. S. Herbert Cox):—"That the members of the Society of Engineers desire to express their deep sympathy with Her Majesty the Queen, Her Royal Highness Princess Henry of Battenberg, and the other members of the Royal Family, in the loss they have sustained by the death of Prince Henry of Battenberg, in the service of the country."

WANTED.

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"Echuca ...	Feb. 21	Feb. 22	Feb. 22	Feb. 22
Athenian ...	Feb. 28	Feb. 29	Feb. 29	Feb. 29
Guelph (to, sc'w) ...	Feb. 23	Feb. 24	Feb. 24	Mar. 7

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Extracts and Notes from Mining Operations and
Reports on these during the past 25 years.

By WILLIAM GUTHRIE BOWIE.

(Continued from page 128.)

2. EXPLOITATION BY PILLAR AND STALL.

THIS system of exploitation, as applied to the masses of cupreous pyrites, is the worst of all, besides being the most expensive of any of the methods of exploitation, and obliging the leaving in of about two-fifths of the mass of the ore. This is the first method that was adopted at the time of the revival of mining in Spain, and is apparently that which the ancients adopted, in some cases very irregularly, and like large caves, probably assisted by underhand stoping, the irregularities being owing to there going after and extracting the pockets of the best ore.

Its use is still continued in most mines with open casts in their deep workings, and hence is that usual in the hard poor copper ores, and in such cases still more expensive.

The reasons why so expensive are—the necessity to open up the headings in the solid ore and all the stalls, the necessity of leaving columns and between floors, and these in some cases have to be extra large and thick and proportionately low in respect of height, and again, the cleavages, joints, and slickensides of these, and easy disintegration of this ore exposed to atmospheric influences, assisted by the numerous flaws and joints, &c., in the masses of ore, while sometimes one side is soft spongy ore, and the other hard, and other portions so split and flawed as to be more like an aggregation of shattered rock than otherwise, these causing often the necessity of costly timbering. Blasting is often difficult and dangerous; besides, the Government engineers only stipulate that one-third should be removed; hence in this case two-thirds would remain.

In actual practice three-fifths can be obtained in a fairly homogeneous mass, but generally after a short time these columns and levels give way, or a crush or collapse of several take place.

In the following calculations three-fifths is allowed as extracted and two-fifths as left. This causes an extra cost in everything, including purchase and development in such cases, owing to less ore being extracted, and these costs would be increased in proportion to that proportion of the mass left in the mine. At the same time as sulphates are formed, these, washed out and treated for copper precipitates, somewhat lessen this evil of leaving in so much ore, but before the works advance to allow of this washing, a long period must elapse of exploitation, and if on royalty per ton of ore the owners would object to this running of their mine, and hence in this case all this ore may be accounted as practically lost to the exploiter, while the necessity to leave portions of rich ore as columns, &c., is another loss that has no remedy by this system of exploitation.

In notes taken from the cost sheets of the Government when exploiting Rio Tinto, the cost per ton of ore in this class of work for wages, explosives, tools and materials, and transport or extraction to surface, is given as follows:—

	Per ton of ore.
Driving levels, cross cuts, and opening up stalls	10 4
Stoping	7 5
Gallery crowns	7 7
Widening crosscuts and stoping between columns	6 3

Or supposing an equal quantity is produced from each class of operation, the average cost is 7s. 11d. per ton of ore. The sheets made out just before the sale of the mine show some economy on this, as the average is 5s. 11½d. per ton of ore. At present, with improved mining and explosives, the extraction even in the hard ore is on an average about 4s. 7d. per ton of ore put on the surface.

	Per ton of ore.
The result would thus be if we take, for example, the cases of purchase for cash, 2s. 3d. more, or purchase price	20 17-20
Extracted, and for development in the same way, two-thirds more	14 4-5
While the expenses by pillar and stall extraction are	4 7

Making a total cost put on the surface of 8 1½

Now, if this only gave 1 ton of copper, it will be seen that at present prices this would not pay, but in such cases as this, every endeavour is made to obtain ore, averaging 2-5 per cent. Cu, and where railways and piers are available sent to export.

	Per ton of ore.
If we take the case of royalty on the ton of ore extracted this will be for development per ton of ore 2s. 3d. more, or	14 4-5
Extraction by pillar and stall	4 7
Royalty on the tons of ore extracted	1 8

Cost per ton of ore put on the surface 7 7 4-5

And as above a 2-5 per cent. Cu average is endeavoured, and where the same facilities of export exist sent to export, but most of these now depend alone on local treatment for copper alone, it will be observed that in both cases profitable exportation depends on railways and shipping piers, and if we consider that the ore exported (say) by Rio Tinto, which ore shows a general average for all extracted, including that sent to local treatment of 2-822 per cent Cu, and that the portion exported has been in consequence much richer, yet only 2-144 per cent. Cu has been realised from the same, we find that to export this ore becomes at present a very risky matter.

Those who depend on carts cannot put 100 tons in England under £181 13s. 10½d. in the case of purchase, or £179 10s. in that of royalty, while the value for copper and sulphur, &c., will not be much beyond £144 10s. 2½d. Hence there will be a loss—£37 3s. 9d. in the case of purchase, and £34 19s. 9d. in that on royalty. This loss the large companies turn to profit by savings in transport, freights, and other expenses, hence all the others can only depend on local treatment, and this alone for superior ore, and for poor ores they have no remedy but await better prices, or find some new and economical process of extraction and treatment, and even although the two-thirds of ore left in the mine is the companies' property by purchase, it is safest to calculate the cost of this and development as two-fifths higher. However, new methods of exploitation are in use, and pillar and stall work may be assumed as somewhat obsolescent, if not altogether obsolete, and need not be again referred to after the foregoing remarks, except in referring to the deep workings in open cast works.

(To be continued.)

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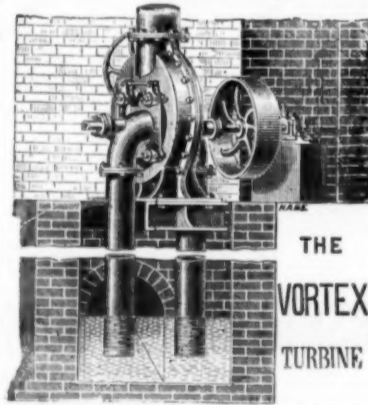
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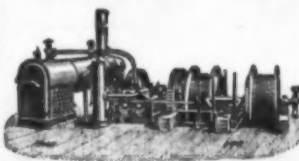
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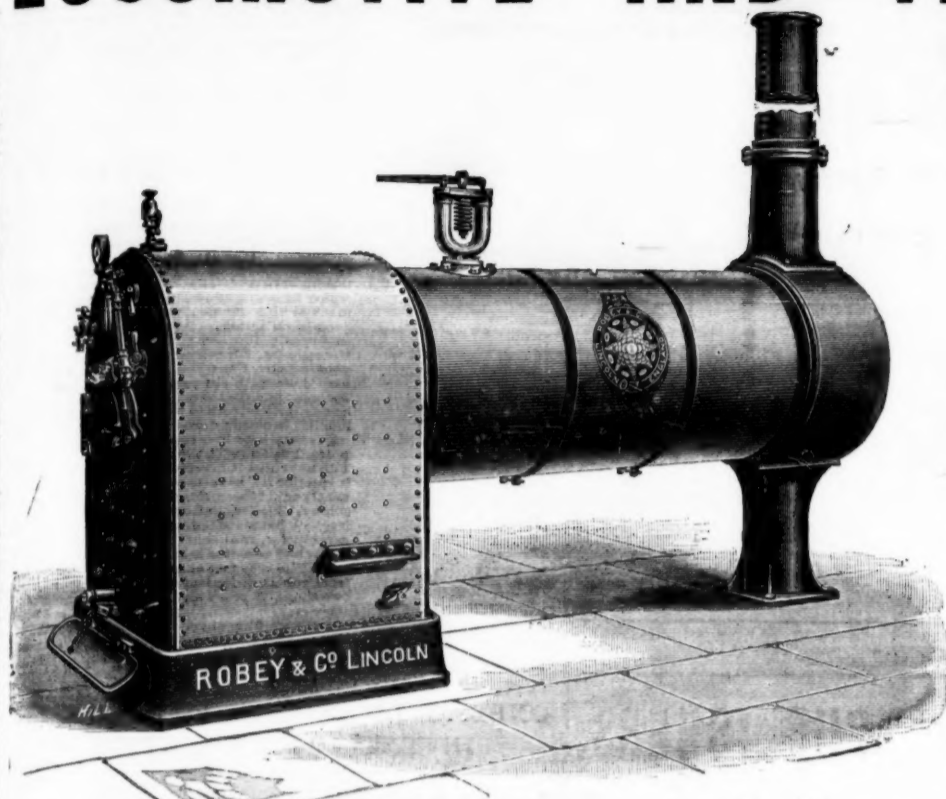


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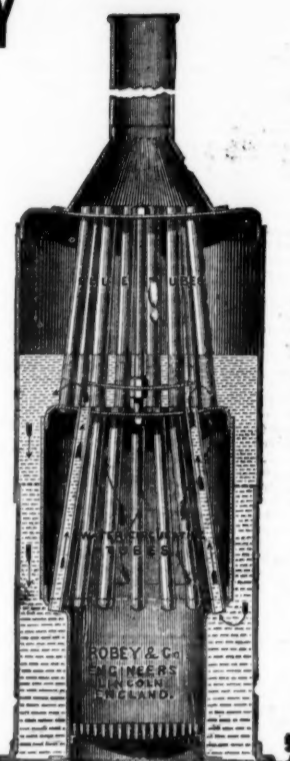


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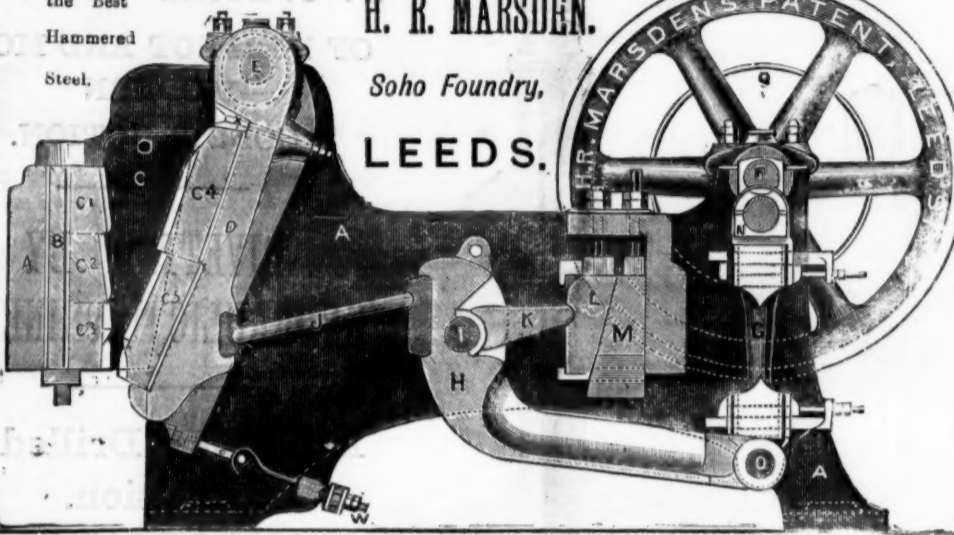
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